Air Quality Permitting
Response to Public Comments

April 2, 2018

Permit to Construct No. P-2011.0120

Project No. 61528

Lamb Weston, Inc. – Twin Falls Plant
Twin Falls, Idaho

Facility ID No. 083-00062

Prepared by:
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AIR QUALITY DIVISION

Final

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BACKGROUND

The Idaho Department of Environmental Quality (DEQ) provided for public comment on the proposed permit to construct for Lamb Weston, Inc. – Twin Falls Plant, Twin Falls from February 15 through March 19, 2018, in accordance with IDAPA 58.01.01.209.01.c. During this period, comments were submitted in response to DEQ's proposed action. Each comment and DEQ's response is provided in the following section. All comments submitted in response to DEQ's proposed action are included in the appendix of this document.

PUBLIC COMMENTS AND RESPONSES

Public comments regarding the technical and regulatory analyses and the air quality aspects of the proposed permit are summarized below. Questions, comments, and/or suggestions received during the comment period that did not relate to the air quality aspects of the permit application, the Department's technical analysis, or the proposed permit are not addressed. For reference purposes, a copy of the Rules for the Control of Air Pollution in Idaho can be found at: http://adminrules.idaho.gov/rules/current/58/0101.pdf.

COMMENTS ON THE PERMIT

Comment 1: Table 1.1 of the permit.
Requested to change "tons/hr" to "tons/hr finished product" to make it clear.

Response 1: Changes are made.

Comment 2: Permit Conditions 2.15.4 to 2.15.7, 2.17, 2.20, 3.1, 3.5.3, 3.5.5, 3.11.2, 4.7.1, 4.7.3, 5.9 and Table 3.2.
Requested some editorial changes to these PCs.

Response 2: Changes are made.

Comment 3: Permit Conditions 3.7.4 and 4.6.4.
Proposed to add "average" to the end of "Compliance with the annual emission limits shall be based on a rolling 12-month".

Response 3: "period" is added to the end of "Compliance with the annual emission limits shall be based on a rolling 12-month" as that was the intent. It is not based on 12-month average and is for a 12-month period.

Comment 4: Permit Conditions 3.9.1 and 3.9.2

As originally written, the permit establishes a fixed 5-year schedule for performance testing: 2022, 2027, 2032, …The proposed revisions replace the fixed schedule with a maximum 5-year interval between source tests. This means that if the facility elects to conduct a source test sooner than five years, the five-year clock is reset based on the date of the new source test.

The "61-month" specification provides some leeway in scheduling the source test around the within the required frequency. The provision of an added month is consistent with EPA policies on source testing frequency. For example, a requirement to perform annual compliance testing means testing between 11 months and 13 months after the previous compliance test.

Response 4: PCs 3.9.1 and 3.9.2 are revised.

Comment 5: Permit Condition 4.11.2

Remove "The performance test report shall also summarize the measurements of operating parameters for the associated air pollution control equipment during the test." because dryers do not have air pollution control equipment.

Response 5: **Removed.**

Comment 6: Permit Condition 5.18
Proposed to remove EPA as a receiver of the notification and state the notification was submitted to DEQ, or to review an applicability determination of 40 CFR 60 Subpart Dc for the effluent heater and remove all the requirements of 40 CFR 60 Subpart Dc.

Response 6: **Because this request is beyond the scope of this application and is after the facility draft review and public comment period, it won't be addressed through this permitting action. The applicant may request a permit revision through a separate application.**

COMMENTS ON THE STATEMENT OF BASIS

Comment 7: Requested editorial changes to Description, Permitting History, Application Scope, Application Chronology, Emissions Inventories, Ambient Air Quality Impact Analyses, and Permit Condition Review sections.

Response 7: **Changes are made.**

Comment 8: Table 1 of the SOB
Requested to correct the stack parameters for the dryers in Table 1 of SOB. The stack parameters are taken from modeling for 2007 permit.

Response 8: **Corrections are made.**

Comment 9: Requested to add "DEQ determined that if the sum of the individual emission emissions limits proposed in the application was not greater than the combined limits in the existing permit for those stacks, then the PTC application would not be subject to New Source Review" under Post Project Potential to Emit section above Table 3.

Response 9: **Not added. The addition of the above requested language could cause confusion.**

The SOB has stated what was allowed in the consent order and for this permitting action, such as paragraphs in page 10 and page 21 of the SOB. They read as follows:

"The consent order requires the applicant to replace the combined emissions limits in the 2012 permit with individual emissions limits for fryers, dryers, Boiler No. 1, and Boiler No. 2 without changing the total combined emissions limits."

"While the facility keeps the total PM_{10} emissions from the fryers as they are in the existing 2012 permit to avoid triggering full modeling analysis for PM_{10} and $PM_{2.5}$, the permit would allow potential increases in fryer production rates as long as PM_{10} emissions remain below emissions limits at the higher operating rates…"

Comment 10: To revise the paragraphs for Permit Conditions 2.19 and 2.20 under Permit Conditions Review section to make them clearer.

Response 10: **Changes are made.**

Comment 11: To revise the paragraphs for New Permit Conditions 3.8 to 3.11, 4.9, Appendix A under Permit Conditions Review section to reflect the changes made to PC 3.9 and to make them clearer.

Response 11: **Changes are made except "to avoid triggering New Source Review" is not used as it could cause confusion.**

The consent order and this permitting action allow the facility to keep the total PM_{10} emissions from the fryers as they are in the existing 2012 permit to avoid triggering a full modeling analysis for PM_{10} and $PM_{2.5}$. This permitting action allows potential increases in fryer production rates as long as fryer PM_{10} emissions remain below the fryers' emissions limits. Refer to Response 9 for more details.

Comment 12: TAP emissions

DEQ acknowledges that TAPs could be emitted from frying food or frying oil at high temperature; however, DEQ does not plan on acquiring a better understanding of this potential source of TAP emissions. IDAPA 58.01.01.161 ("Toxic Substances") prevents DEQ from issuing a permit if it will release toxic air pollutants that could cause harm to human or animal life or vegetation. How has DEQ satisfied this requirement? Please provide specific proof of compliance with the Toxic Substances rule with regards to TAPs emissions from industrial potato fryers. DEQ must attain a better understanding of the potential for TAP emissions from this source prior to approving this permit rather than at some undetermined point in the future.

Response 12: **DEQ currently does not have TAP emissions data for fryers that are used in potato processing facilities. DEQ has communicated this with the applicant; the facility has stated that they were not aware of formal characterization of TAP emissions from French fry operations. DEQ staff has also looked into EPA NESHAP and AP-42. EPA NESHAP does not have a subpart for the frying operations. EPA AP-42 has VOC emissions information for Chip Deep Fat Frying; but no TAP emissions information is available.**

Based on the current available information, DEQ does not have the data to say that the facility would release toxic air pollutants that could cause harm to human or animal life or vegetation. Therefore, DEQ is required to issue the permit.

Comment 13: VOC emission limits

Why did DEQ choose to only include a facility-wide VOC emission limit rather than also including VOC limits for specific emission sources (as was done with other criteria pollutants)? DEQ states "no modeling would be performed for VOC for establishing hourly or annual emissions limits for an individual emissions unit." We request that DEQ clarify why that is the case.

Additionally, in Appendix A of the Draft Permit, footnote 'f' is missing an explanation below the emission limits table. This explanation apparently relates to the VOC emission limits, and should be added to the final permit.

Response 13: **The purpose of including the facility-wide VOC emissions limit is to keep the emissions below the major source threshold of 100 T/yr so that the facility won't become a major source.**

The emissions limits for the specific emissions sources in the permit are based on modeling analysis and are for compliance with NAAQS. Because DEQ does not perform modeling for VOC, VOC emissions limits for the specific emissions sources are not required.

The following is taken from DEQ's modeling memo and explains why VOC modeling is not performed:

"Atmospheric dispersion models used in stationary source air permitting analyses (see Section 3.3.3) cannot be used to estimate O_3 impacts resulting from VOC and NOx emissions from an industrial facility. O_3 concentrations resulting from area-wide

emissions are predicted by using more complex airshed models such as the Community Multi-Scale Air Quality (CMAQ) modeling system. Use of the CMAQ model is very resource intensive and DEQ asserts that performing a CMAQ analysis for a particular permit application is not typically a reasonable or necessary requirement for air quality permitting."

The footnote "f" is added to the permit: f) Volatile Organic Compound

Comment 14: CO emission calculation

In the Statement of Basis, DEQ states that calculation of CO emissions for the process dryers is "not very accurate." This statement concerns us, and we request that the DEQ elaborate on why this calculation is not accurate. For example, what is the error associated with this calculation, and what needs to be done to make it more accurate?

Response 14: **CO emissions for the process dryers are calculated using the AP-42 CO EF for natural gas combustion in a boiler. The differences in combustion conditions between boilers and process burners used in potato dryers reduce the reliability of the AP-42 CO EF for calculating CO emissions from the dryers. Because the margin between the facility-wide CO limit of 81.9 T/yr and major source threshold of 100 T/yr is large enough to accommodate potential errors in the CO emissions estimates for dryers, a CO source test for dryers is not required for this permitting action. However, if the facility requests to increase facility-wide CO emissions limit to be closer to the major source threshold of 100 T/yr in the future, a source test to verify dryers' CO emissions factors will be required.**

Appendix (2018AAG711)

Public Comments Submitted for

Permit to Construct

P-2011.0120

Air Quality

PERMIT TO CONSTRUCT

Permittee	Lamb Weston, Inc. – Twin Falls Plant, Twin Falls
Permit Number	P-2011.0120
Project ID	61528
Facility ID	083-00062
Facility Location	856 Russet Street Twin Falls, ID 83301

Permit Authority

This permit (a) is issued according to the "Rules for the Control of Air Pollution in Idaho" (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued Proposed for Public Comment

Shawnee Chen, P.E., Permit Writer

Mike Simon, Stationary Source Manager

1. Permit Scope

Purpose

1.1. This is a revised Permit to Construct that fulfills the requirements in the consent order signed on September 9, 2014, updates source information to include improved fryer emissions controls, establishes a facility-wide VOC emissions limit for being a synthetic minor source, changes compliance demonstration methods, includes the two anaerobic digesters with a flare, and updates some permit conditions.

[PROPOSED]

1.2. Those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right hand margin.

[PROPOSED]

1.3. This PTC replaces PTC No. P-2011.0120, issued on May 4, 2012 for the potato processing plant and PTC No. P-2017.0026, issued on May 12, 2017 for the wastewater treatment plant flare.

[PROPOSED]

Regulated Sources

Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1 Regulated Sources

Sources	Control Equipment
Line 1 Fryer: Manufacturer: Heat and Control Installed/Modified: 1988 30 tons/hr finished product assumed in the EI for this permitting action	Venturi Scrubber (L1-SP Scrubber): Manufacturer: SLY Inc. Model: Model 9
Special Products Fryer: Manufacturer: Heat and Control Installed/Modified: 1977 5 tons/hr finished product assumed in the EI for this permitting action.	
Line 2 Fryer: Manufacturer: Heat and Control Installed/Modified: 1970 42 tons/hr finished product assumed in the EI for this permitting action	Air Washer: Manufacturer: Gellert Company Model: Custom
Line 4 Fryer: Manufacturer: Heat and Control Installed/Modified: 1989 37 tons/hr finished product assumed in the EI for this permitting action	Air Washer: Manufacturer: Reyco Model: Custom
Line 1 Dryer: Manufacturer: National Installed/Modified: 1986 30 tons/hr finished product assumed in the EI for this permitting action Rated Burner Capacity: 36.0 MMBtu/hr Fuel: natural gas only	None
Line 2 Dryer: Manufacturer: National Installed/Modified: 1988/2002 42 tons/hr finished product assumed in the EI for this permitting action Rated Burner Capacity: 4.0 MMBtu/hr Fuel: natural gas only	None

Sources	Control Equipment
Line 4 Dryer: Manufacturer: National Installed/Modified: 1989 37 tons/hr finished product assumed in the EI for this permitting action Rated Burner Capacity: 27.5 MMBtu/hr Fuel: natural gas only	None
Special Products Dryer: Manufacturer: B Eagle Installed/Modified: 1976/2007/ 5 tons/hr finished product assumed in the EI for this permitting action Rated Burner Capacity: 5.0 MMBtu/hr Fuel: natural gas only	None
Boiler No. 1: Manufacturer: Combustion Engineering Model: 26-A-15 Installed/Modified: 1989 Rated Burner Capacity: 180 MMBtu/hr Fuel: natural gas and/or biogas only	None
Boiler No. 2: Manufacturer: Murray-Trane Model: MCF4-57 Installed/Modified: 1982 Rated Burner Capacity: 72 MMBtu/hr Fuel: natural gas only	None
Effluent heater: Manufacturer: American Heating Co. Model: AHC-1500 Installed/Modified: 2002 Rated Burner Capacity: 19 MMBtu/hr Fuel: natural gas and/or biogas only	None
L4 Emergency IC Engine: Manufacturer: Cummins Model: NT855C Manufacture Date: 1982 Max. power rating: 355 bhp (230 kw genset) Fuel: diesel Annual Use Limit: 52 hrs/yr	None
L1 Emergency IC Engine: Manufacturer: Cummins Model: 6BT5.9 G-2 Manufacture Date: 1997 Max. power rating: 166 bhp (100 kw genset) Fuel: diesel Annual Use Limit: 52 hrs/yr	None
Miscellaneous heaters and burners Combined Maximum Heat Input: 109 MMBtu/hr	None
Biogas Flare Manufacturer: Groth Corp. Model No.: 8391 Installed: 1991 Design Biogas Feed Rate: 13,500 scf/hr biogas The flare is rated at 13 MMBtu/hr	None

[PROPOSED]

2. Facility-Wide Conditions

Fugitive Dust

2.1 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of particulate matter. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, oil, water, or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
- Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.
- Prompt removal of earth or other stored material from streets, where practical.

2.2 Fugitive Emissions Controls Recordkeeping

The permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.

2.3 Fugitive Dust Complaints

The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

2.4 Facility-Wide Fugitive Dust Inspections

The permittee shall conduct a quarterly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

Odors

2.5 Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

2.6 Odor Complaints

The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Visible Emissions

2.7 Visible Emissions

The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, NOx, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.

2.8 Visible Emissions Inspections

The permittee shall conduct a monthly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. The visible emissions inspection shall consist of a see/no see evaluation for each potential source. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60 minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

Open Burning

2.9 Open Burning

The permittee shall comply with the requirements of the Rules for Control of Open Burning, IDAPA 58.01.01.600-617.

Reports and Certifications

2.10 Reports and Certifications

Any reporting required by this permit shall be submitted to the following address:

Air Quality Permit Compliance
Department of Environmental Quality
Twin Falls Regional Office
650 Addison Avenue West, Suite 110
Twin Falls, ID 83301
Phone: (208) 736-2190
Fax: (208) 736-2194

[PROPOSED]

Fuel-Burning Equipment

2.11 Fuel Burning Equipment Grain Loading

The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas and 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid. Corrections for altitude shall be made in accordance with IDAPA 58.01.01.680.

[PROPOSED]

Sulfur Content

2.12 Fuel Sulfur Content

No person shall sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:

- ASTM Grade 1 fuel oil - 0.3% by weight.
- ASTM Grade 2 fuel oil - 0.5% by weight.
- ASTM Grades 4, 5 and 6 fuel oil – 1.75% by weight.

2.13 Fuel Sulfur Content Recordkeeping

The permittee shall maintain documentation of supplier verification of distillate fuel oil content on an as received basis.

Emission Limits

2.14 Facility-Wide Emission Limits

The facility shall comply with the facility-wide emission limits contained in Appendix A of this permit.

[PROPOSED]

Monitoring and Recordkeeping Requirements

2.15 Monitoring and Recordkeeping Requirements for Compliance with Facility-Wide Annual Limits

The permittee shall maintain the following records on a monthly basis. The averaging period for each of the following records is each calendar month.

2.15.1 The amount of natural gas in MMscf combusted at the facility, by month. Natural gas utility bills may be used for this purpose.

2.15.2 The amount of natural gas in MMscf combusted in Boiler 1, by month, based on Boiler 1 fuel combustion records maintained in accordance with **NSPS – Subpart Db New Source Performance Standard – Fuel Monitoring** permit condition (PC 5.13).

2.15.3 The amount of biogas in MMscf combusted at the facility, by month, based on biogas usage records maintained in accordance with the **Biogas Use Monitoring** permit condition (PC 5.6).

2.15.4 The amount of biogas combusted in the Biogas flare, by ~~the~~ month, and the average H_2S concentration, by month, based on biogas usage records maintained in accordance with the **Biogas Flow and H_2S Concentration Monitoring** permit condition (PC 7.5).

2.15.5 The amount of PM_{10} emitted in pounds, by month, from the stacks of the Line 1 and ~~Specific~~ Special Products (L1-SP) Fryers, the Line 2 Fryer, and the Line 4 Fryer, based upon PM_{10} emission records maintained in accordance with the **PM_{10} Compliance Demonstration for Fryers** permit condition (PC 3.7).

2.15.6 The amount of PM_{10} emitted in pounds, by month, from the stacks of the Line 1 ~~Dryer~~, Line 2 ~~Dryer~~, Line 4 ~~Dryer~~, and Special Products Dryers, based upon PM_{10} emission records maintained in accordance with **PM_{10} Compliance Demonstration for Dryers** permit condition (PC 4.6).

2.15.7 The amount of finished product in tons produced, by month, from the Line 1, Line 2, Line 4, and Special Products production lines, based upon finished product production records maintained in accordance with the **PM_{10} Compliance Demonstration** permit conditions (PCs 3.7 and 4.6) ~~for the stacks of the Line 1, Line 2, Line 4, and the Special Products fryers and dryers~~.

2.15.8 The hours of operation of each emergency generator, by month, based on records maintained in accordance with the **Emergency IC Engine Operations** permit condition (PC 6.7).

[PROPOSED]

2.16 Monthly PM_{10} Emissions Calculations

The permittee shall calculate monthly PM_{10} emissions in tons by completing the calculations identified in the table below:

Multiply this operating parameter recorded for the month…	By this emission factor …
Natural gas combusted at the facility (less natural gas combusted in Boiler 1)	7.6 lb PM_{10}/MMscf
Boiler 1 natural gas	7.6 lb PM_{10}/MMscf
Total biogas combusted less total biogas flared, MMscf	7.6 lb PM_{10}/MMscf
Total biogas flared, MMscf	7.6 lb PM_{10}/MMscf
The pounds of PM_{10} emitted from the L1-SP Scrubber, Line 2 Fryer, and Line 4 Fryer stacks are calculated in accordance with Permit Condition 3.7	
The pounds of PM_{10} emitted from Line 1 Dryer, Line 2 Dryer, Line 4 Dryer, and the Special Products Dryer stacks are calculated in accordance with Permit condition 4.6	
Operating hours of 230KW generator	0.78 lb PM_{10}/hr
Operating hours of 100KW generator	0.37 lb PM_{10}/hr

Monthly PM_{10} emissions shall be determined by summing together the PM_{10} emissions identified in the table above, and dividing the sum by 2,000 to convert from lb of PM_{10} to tons of PM_{10}.

[PROPOSED]

2.17 Monthly Nitrogen Oxides (NOx) Emissions Calculations

The permittee shall calculate monthly NOx emissions in tons by completing the calculations identified in the table below:

Multiply this operating parameter for the month…	By this emission factor …
Natural gas combusted in Boiler 1, MMscf	(lb NOx/MMBtu ~~obtained in Permit Condition 5.14~~)[a] * (1,020 MMBtu/MMscf; ~~natural gas higher heating value~~)[b] ~~[a]~~
Natural gas combusted at the facility less natural gas combusted in Boiler 1, MMscf	100 lb NOx/MMscf
Total biogas combusted less total biogas flared, MMscf	100 lb NOx/MMscf
Total biogas flared, MMscf	54.4 lb NOx/MMscf
Operating hours of 230K Generator	11.01 lb NOx/hr
Operating hours of 100K Generator	5.15 lb NOx/hr

(a) ~~(a)~~ As determined using PC 5.14. The emission factor used shall be the rolling 30-day average calculated on the last day of the month.

~~(a)~~(b) 1020 MMBtu/MMscf is the higher heating value for natural gas.

Monthly NOx emissions shall be determined by summing together the NOx emissions identified in the table above, and dividing the sum by 2,000 to convert from lb of NOx to tons of NOx.

[PROPOSED]

2.18 Monthly Sulfur Dioxide (SO_2) Emissions Calculations

The permittee shall calculate monthly SO_2 emissions in tons by completing the calculations identified in the table below:

Multiply this operating parameter recorded for the month…	By this emission factor …
Natural gas combusted at the facility, MMscf	0.6 lb SO_2/MMscf
Total Biogas combusted at the facility, including flared biogas, MMscf	0.166*S, where S is the average H_2S concentration in ppmv during the month as calculated in Permit Condition 5.8.
Operating hours of 230K Generator	0.73 lb SOx/hr
Operating hours of 100K Generator	0.34 lb SOx/hr

Monthly SO_2 emissions shall be determined by summing together the SO_2 emissions identified in the table above, and dividing the sum by 2,000 to convert from lb of SO_2 to tons of SO_2.

[PROPOSED]

2.19 Monthly Carbon Monoxide (CO) Emissions Calculations

The permittee shall calculate monthly CO emissions in tons by completing the calculations identified in the table below:

Multiply this operating parameter recorded for the month…	By this emission factor …
Natural gas combusted in Boiler 1, MMscf	33.2 lb CO/MMscf (until a new EF required by PC 5.9 is developed)
Natural gas combusted at the facility less natural gas combusted in Boiler 1, MMscf	84 lb CO/MMscf
Total biogas combusted less total biogas flared, MMscf	84 lb CO/MMscf
Total biogas flared, MMscf	248 lb CO/MMscf
Operating hours of 230K generator	2.37 lb CO/hr
Operating hours of 100K generator	1.11 lb CO/hr

Monthly CO emissions shall be determined by summing together the CO emissions identified in the table above, and dividing the sum by 2,000 to convert from lb of CO to tons of CO.

[PROPOSED]

2.20 Monthly VOC Emissions Calculations

The permittee shall calculate monthly VOC emissions in tons by completing the calculations identified in the table below.

Multiply this operating parameter for the month…	By this emission factor …
Natural gas combusted at the facility	5.5 lb VOC/MMscf
Total biogas combusted less total biogas flared, MMscf	5.5 lb VOC/MMscf
Total biogas flared, MMscf	528 lb VOC/MMscf
The amount of finished product in tons produced from the Line 1 production line and Special Product line	The VOC EF listed in Table 3.3 of the permit[a]
The amount of finished product in tons produced from the Line 2 production line	The VOC EF listed in Table 3.3 of the permit[a] ~~The VOC EF listed in Table 3.3 of the permit~~
The amount of finished product in tons produced from the Line 4 production line	The VOC EF listed in Table 3.3 of the permit[a] ~~The VOC EF listed in Table 3.3 of the permit~~
Operating hours of 230K generator	0.89 lb VOC/hr
Operating hours of 100Kgenerator	0.42 lb VOC/hr

(a) Or as updated in accordance with PCs 2.21, 3.9 thru 3.11, 4.9 thru 4.11, and 5.9 thru 5.11.

Monthly VOC emissions shall be determined by summing together the VOC emissions identified in the table above, and dividing the sum by 2,000 to convert from lb of VOC to tons of VOC.

[PROPOSED]

2.21 Revisions to Emission Factors

The permittee shall update emissions factors in accordance with Permit Conditions 3.9 to 3.11 for the fryers, Permit Conditions 4.9 to 4.11 for the dryers, and Permit Conditions 5.9 to 5.11 for Boiler No. 1.

The permittee may update emissions factors based on other revised technical information and voluntary source test results.

All revised emissions factors shall be approved by DEQ. Upon approval by DEQ, the revised emission factor shall be used to complete the calculations required in this permit.

[PROPOSED]

2.22 Facility Wide Compliance Demonstration

The permittee shall demonstrate compliance with the facility-wide emissions limits by calculating and recording rolling 12-month total emissions for PM_{10}, NOx, SO_2, CO, and VOC based on the monthly emission calculations in Permit Conditions 2.16 through 2.20. Emission records and calculations shall be maintained on-site for a period of at least five years and shall be made available to DEQ representatives upon request.

[PROPOSED]

2.23 Incorporation of Federal Requirements by Reference

Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein. Documents include, but are not limited to:

- Standard of Performance for New Stationary Sources (NSPS), 40 CFR Part 60, Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units and Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
- National Emission Standards for Hazardous Air Pollutants (NESHAP) Area Sources, 40 CFR Part 63, Subpart ZZZZ - National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

For permit conditions referencing or cited in accordance with any document incorporated by reference (including permit conditions identified as NESHAP or NSPS), should there be any conflict between the requirements of the permit condition and the requirements of the document, the requirements of the document shall govern, including any amendments to that regulation..

[PROPOSED]

3. Line 1 Fryer, Line 2 Fryer, Line 4 Fryer, and Special Products Fryer

3.1 Process Description

Potatoes are fried in one of ~~the~~ four frying processes. Certain products are battered prior to frying. The fryer exhausts contain PM from the potatoes and the oil used for frying and VOCs from the frying process. The fryers are steam-heated; no direct products of combustion are generated by fryer operations. The exhausts from the Line 1 (L1) and Special Products (SP) fryers are combined and exit through a Venturi scrubber stack. The exhausts from the Line 2 (L2) and Line 4 (L4) fryers exit through individual air washer stacks.

[PROPOSED]

3.2 Control Descriptions

The fryer emission control devices are presented in the following table:

Table 3.1 Line 1 Fryer, Line 2 Fryer, Line 4 Fryer, and Special Products Fryer Description

Emissions Units / Processes	Control Devices	Emission Points
Line 1 Fryer	Venturi Scrubber	Venturi scrubber exhaust stack
Special Products Fryer		
Line 2 Fryer	Air Washer	Air washer exhaust stack
Line 4 Fryer	Air Washer	Air washer exhaust stack

[PROPOSED]

Emission Limits

3.3 Emissions Limits

The emissions from the L1-SP Fryers (venturi scrubber exhaust), Line 2 Fryer (air washer exhaust), and Line 4 Fryer (air washer exhaust) stacks shall not exceed any emission limits in Appendix A of the permit.

[PROPOSED]

Operating Requirements

3.4 Stack Height Requirements

The stack height of Line 4 Fryer shall be no less than 50 feet.

[PROPOSED]

3.5 Operating Requirements for Venturi Scrubber and Air Washers

3.5.1 The permittee shall install and operate a Venturi scrubber to control emissions from Line 1 Fryer and Special Products Fryer.

3.5.2 The permittee shall install and operate air washers to control emissions from Line 2 Fryer and Line 4 Fryer.

3.5.3 ~~The operating parameters for f~~Operating parameters for fryer air pollution control equipment shall be maintained within the operating parameter limits contained in Table 3.2 or as modified in accordance with PC 3.5.4.~~maintained as follows:~~

Table 3.2 Initial Operating Parameter Limits for Air Pollution Control Equipment

Air Pollution Control Device	Operating Parameter	Operating Parameter Limit	Criterion
L1-SP Scrubber	Pressure drop across Venturi throat	12 inches water column	Not less than
	Water flow rate to Venturi throat	252 gpm	Not less than
Line 2 Air Washer	Water flow rate	134 gpm	Not less than
Line 4 Air Washer	Water flow rate	146 gpm	Not less than

3.5.4 As an alternative to the initial operating parameter limits listed in Table 3.2, the permittee may establish revised operating parameter limits by conducting a performance test that demonstrates compliance with the PM_{10} emission limits in Appendix A of the permit while operating the air pollution control device at the alternative operating parameter values. The performance test shall be conducted in accordance with the Test Methods and Procedures specified in the Rules (IDAPA 58.01.01.157) and in accordance with a DEQ-approved source test protocol. The protocol shall describe how the operating parameters will be monitored during the performance test. All operating parameters specified in this permit condition shall be continuously monitored and recorded every 15 minutes during each test run.

3.5.5 The permittee may request permission to operate air pollution control equipment outside of previously established operating ~~ranges~~ parameter limits during the performance test by including in the written source test protocol a request to DEQ to ~~operate under alternative~~waive operating parameters limits ~~during during the duration of~~ the performance test.

3.5.6 After the source test is completed, the permittee may request in writing approval to operate air pollution control equipment in accordance with alternative operating parameters values. The request shall include a source test report and justification for the alternative operating parameters. Upon receiving DEQ written approval of the source test and the requested alternative operating parameters, the permittee shall operate in accordance with those DEQ-approved alternative operating parameters. A copy of DEQ's approval of alternate operating parameter limits shall be maintained on site with a copy of this permit.

[PROPOSED]

Monitoring and Recordkeeping Requirements

3.6 Monitoring Requirements for Venturi Scrubber and Air Washers

3.6.1 The permittee shall continuously monitor the following air pollution control device operating parameters and collect data daily:

- Pressure drop across the Venturi throat of the L1-SP scrubber in inches of water.
- Water flow rate to the Venturi throat of the L1-SP scrubber in gallons per minute.
- Water flow rate to Line 2 air washer in gallons per minute.
- Water flow rate to Line 4 air washer in gallons per minute.

3.6.2 The permittee shall inspect the Venturi scrubbing media delivery nozzles and the air washer mist eliminators each quarter to verify that the nozzles and mist eliminators are not plugged, eroded or otherwise not functioning as designed. The permittee shall maintain a record of the inspections and any maintenance conducted.

3.6.3 The permittee shall maintain records of the results of all monitoring and inspections in accordance with the General Provisions of this permit.

[PROPOSED]

3.7 PM_{10} Compliance Demonstration for Fryers

3.7.1 Compliance with the PM_{10} limits in Appendix A for the fryers shall be demonstrated by calculation, in which the amount of production is multiplied by an approved production-based emission factor, in accordance with the following formula:

Ei = EFi * Pi

Where:

Ei = emissions from stack i for the calculation period, lb

EFi = emission factor for stack i, lb pollutant/ton finished product

Pi = amount of finished product from line i for the calculation period, tons

3.7.2 Emission factors for each fryer stack shall be determined from the most recent performance test for each stack or as otherwise approved by DEQ.

3.7.3 The permittee shall monitor and record the daily finished potato product produced from each of the Line 1, Line 2, Line 4, and Special Products production line for use in calculating PM_{10} emissions in accordance with Permit Condition 3.7.

Daily production records may be maintained on a work-day basis, in which a work day commences at a specific time of day and lasts consecutive 24 hours.

3.7.4 Compliance with the annual emission limits shall be based on a rolling 12-month average. Each month shall be a calendar month. The rolling 12-month for a given month shall be the sum of emissions for that month plus the emissions for the previous consecutive 11 months.

3.7.5 Records of stack testing and the determination of emission factors shall be maintained at least five years or until such time as a revised emission factor is established. Records may be maintained in electronic format.

[PROPOSED]

Performance Testing Requirements and Development of Emission Factors

3.8 Initial Emission Factors for PM_{10} and VOC

Until performance testing and revisions to emission factors are completed in accordance with Sections 3.9 through 3.11 of this permit, the PM_{10} and VOC emission factors for fryer exhausts shall be those shown in Table 3.3.

Table 3.3 Initial Emission Factors for PM_{10} and VOC

Exhaust Stack	PM_{10}, lb/ton produced	VOC, lb/ton produced
L1-SP Scrubber	0.0767	0.249
Line 2 Air Washer	0.0508	0.132
Line 4 Air Washer	0.181	0.128

3.9 PM_{10} and VOC Performance Test Schedule

For Line 1 and Special Products Fryers

3.9.1 By October 31, 2022~~,~~ the permittee shall conduct PM_{10} and VOC performance tests on the L1-SP scrubber exhaust. Subsequent performance testing for PM_{10} and VOC shall occur within 5 years (61 months) after the previous source test~~and then every five years thereafter~~, or at a DEQ approved alternative frequency. In accordance with PC 3.11, updated emissions factors for PM_{10} and VOC shall be determined based on the results of the performance test and submitted to DEQ for approval. Upon approval by DEQ, ~~the permittee shall conduct PM_{10} and VOC performance tests on the L1-SP scrubber exhaust to develop updated emissions factors for PM_{10} and VOC. The DEQ approved~~the updated emission factors shall be used to calculate PM_{10} and VOC emissions, effective from the date of the performance test.

Comment [SN1]: As originally written, the permit establishes a fixed 5-year schedule for performance testing: 2022, 2027, 2032, ... The proposed revisions replace the fixed schedule with a maximum 5-year interval between source tests. This means that if the facility elects to conduct a source test sooner than five years, the five-year clock is reset based on the date of the new source test.

The "61-month" specification provides some leeway in scheduling the source test around the within the required frequency. The provision of an added month is consistent with EPA policies on source testing frequency. For example, a requirement to perform annual compliance testing means testing between 11 months and 13 months after the previous compliance test.

For Line 2 Fryer and Line 4 Fryer

3.9.2 By October 31, 2022~~ and then every five years thereafter, or at a DEQ approved alternative frequency, the permittee shall conduct PM_{10} and VOC performance tests on the Line 2 and Line 4 air washer exhausts to develop updated emissions factors for PM_{10} and VOC. The DEQ approved updated emission factors shall be effective from the date of the test.~~, the permittee shall conduct PM_{10} and VOC performance tests on the Line 2 and Line 4 air washer exhausts. Subsequent performance testing for PM_{10} and VOC shall occur within 5 years (61 months) after the previous source test, or at a DEQ approved alternative frequency. In accordance with PC 3.11, updated emissions factors for PM_{10} and VOC shall be determined based on the results of the performance test and submitted to DEQ for approval. Upon approval by DEQ, the updated emission factors shall be used to calculate PM_{10} and VOC emissions, effective from the date of the performance test.

[PROPOSED]

3.10 PM_{10} and VOC Performance Test Procedures

3.10.1 The permittee shall measure total PM_{10} using approved EPA test methods. Alternately, the permittee may measure PM emissions using EPA Test Methods 5 and 202, and consider all of the measured PM to be PM_{10}. The permittee shall measure VOC emissions using approved EPA test methods.

3.10.2 The permittee shall submit a test protocol for performing VOC emissions testing for the fryers, and upon approval by DEQ, shall perform VOC performance testing in accordance with the approved test protocol.

3.10.3 Performance tests conducted to demonstrate compliance with this permit shall be performed in accordance with IDAPA 58.01.01.157, the Performance Testing General Provision, and the following requirements:

- The permittee shall operate the source being tested at worst-case normal operating conditions as defined by IDAPA 58.01.01.157.
- The permittee shall observe visible emissions during each performance test run using methods specified in IDAPA 58.01.01.625.
- The permittee shall monitor and record operating parameters for air pollution control equipment as listed in Permit Condition 3.7.3 during the stack test at a minimum of once every 15 minutes.
- The permittee shall monitor and record finished potato production from the fryer or fryers being tested, expressed as tons per hour, during each performance test run. Finished hourly potato production shall be determined using procedures identified in approved source test protocol.

[PROPOSED]

3.11 PM_{10} and VOC Performance Test Report

3.11.1 A written report shall be submitted to DEQ in accordance with IDAPA 58.01.01.157.04 for any source test performed to satisfy a performance test requirement imposed by state or federal regulation, rule, permit, or consent decree, or to revise an emission factor or air pollution control device operating parameter limit.

3.11.2 The performance test report shall include a determination of any revisions to PM_{10} and VOC emission factors for the stacks tested, based upon the PM_{10} and VOC emissions measured during the test and the production data obtained during the test. The performance test report shall also summarize the measurements of operating parameters for the associated air pollution control equipment during the test, including a comparison of the measured data with ~~the~~ existing operating ~~specifications parameter limits included in Permit Condition 3.5.3~~established in accordance with PC 3.5, and documentation of changes in air pollution control equipment operating parameter limits~~s~~ based on performance test results.

[PROPOSED]

4. Line 1 Dryer, Line 2 Dryer, Line 4 Dryer, and Special Products Dryer

Process Description

4.1 Process Description

Potatoes are peeled and cut, the defects are removed, and the cut potatoes are graded and blanched. Peelers and blanchers are steam heated. Only water vapor is emitted from the blanchers and peelers.

After blanching, the potatoes are dried in one of the four natural gas-fired dryers before entering fryers. The emissions from the dryers include PM and by-products of natural gas combustion.

4.2 Control Device Descriptions

The dryer emission control devices are presented in Table 4.1:

Table 4.1 Line 1 Dryer, Line 2 Dryer, Line 4 Dryer, and Special Products Dryer Description

Emissions Units / Processes	Control Devices	Emission Points
Line 1 Dryer	None	Dryer Exhaust
Line 2 Dryer	None	Dryer Exhaust
Line 4 Dryer	None	Dryer Exhaust
Special Products Dryer	None	Dryer Exhaust

[PROPOSED]

Emission Limits

4.3 Emission Limits

The emissions from Line 1 Dryer, Line 2 Dryer, Line 4 Dryer, and Special Products Dryer stacks shall not exceed any emissions limit in Appendix A of this permit.

[PROPOSED]

Operating Requirements

4.4 Fuel Specifications

The permittee shall only burn natural gas in the dryers.

[PROPOSED]

4.5 Maximum Heat Input Rates

The heat input rates for the dryers shall not exceed the amounts specified below:

- Line 1 Dryer: 36 MMBtu/hr
- Line 2 Dryer: 4 MMBtu/hr
- Line 4 Dryer: 27.5 MMBtu/hr
- Special Product Dryer: 5 MMBtu/hr

[PROPOSED]

Monitoring and Recordkeeping Requirements

4.6 PM_{10} Compliance Demonstration for Dryers

4.6.1 Compliance with the PM_{10} limits in Appendix A for the dryers shall be demonstrated by calculation, in which the amount of production is multiplied by an approved production-based emission factor, in accordance with the following formula:

$Ei = EFi * Pi$

Where:

Ei = emissions from stack i for the calculation period, lb

EFi = emission factor for dryer PM_{10} emissions, lb PM_{10}/ton finished product

Pi = amount of finished product from line i for the calculation period, tons

4.6.2 Emission factors for dryer stacks shall be determined from the most recent performance test for dryer stack emissions stack, as set forth in Permit Conditions 4.7, 4.8 and 4.11, or as otherwise approved by DEQ.

4.6.3 The permittee shall monitor and record the daily finished potato product produced from the Line 1, Line 2, Line 4 and Special Products production lines for use in calculating PM_{10} emissions in accordance with Permit Condition 4.6.

Daily production records may be maintained on a work-day basis, in which a work day commences at a specific time of day and lasts consecutive 24 hours.

4.6.4 Compliance with the annual emission limits shall be based on a rolling 12-month average. Each month shall be a calendar month. The rolling 12-month for a given month shall be the sum of emissions for that month plus the emissions for the previous consecutive 11 months.

4.6.5 Records of stack testing and the determination of emission factors shall be maintained at least five years or until such time as a revised emission factor is established. Records may be maintained in electronic format.

[PROPOSED]

Performance Testing Requirements and Development of Emission Factors

4.7 Initial PM_{10} Emission Factor and Performance Testing for Dryers

4.7.1 Based upon ~~the~~ previous performance test data, the PM_{10} emission factor for the dryers shall be 0.05 lb per ton of product.

4.7.2 Within three years of the permit issuance, the permittee shall conduct PM_{10} performance testing on a dryer to verify the above emissions factor. If the EF obtained from this verification test is higher than 0.05 lb/Ton of product, the permittee is required to do the following:

- The EF is required to be updated.
- A subsequent source test is required to be conducted within five years of the verification test.

4.7.3 The permittee may conduct stack testing of a dryer at any time to develop a revised PM_{10} emission factor for dryer emissions. Such testing shall be conducted in accordance with Sections 4.8 and 4.11 of this permit.

[PROPOSED]

4.8 PM_{10} Performance Test Requirements for Dryers

4.8.1 The permittee shall measure total PM_{10} emissions using approved EPA test methods. Alternately, the permittee may measure PM emissions using EPA Test Methods 5 and 202 and consider all of the measured PM to be PM_{10}.

4.8.2 The permittee shall submit a test protocol for performing PM_{10} emissions testing from the Line 4 Dryer, and upon approval by DEQ, shall perform PM_{10} performance testing in accordance with the approved test protocol.

4.8.3 Performance tests conducted to demonstrate compliance with this permit shall be performed in accordance with IDAPA 58.01.01.157, the Performance Testing General Provision, and the following requirements:

- The permittee shall operate the dryer to be tested at worst-case normal operating conditions as defined by IDAPA 58.01.01.157.
- The permittee shall observe visible emissions during each performance test run using methods specified in IDAPA 58.01.01.625.
- The permittee shall monitor and record finished potato production from the dryer, expressed as tons-per-hour, during each performance test run. Finished hourly potato production may be based on the average tons per hour over the 8-hour shift(s) during which testing occurred if it is approved by DEQ in the source test protocol.

[PROPOSED]

4.9 VOC Performance Testing for Dryers

If the actual facility-wide VOC emissions, as determined per Permit Condition 2.20 exceed 98 T/yr, the permittee shall perform a source test of VOC emissions from the dryers. If the measured VOC emissions exceed the VOC emissions attributed to natural gas combustion in the dryers, then the permittee shall revise the VOC emission factors for each production line in Permit Condition 2.20 to account for the added VOC emissions from the dryers.

[PROPOSED]

4.10 VOC Performance Test Procedures

4.10.1 The permittee shall measure VOC emissions using approved EPA test methods.

4.10.2 The permittee shall submit a test protocol for performing VOC emissions testing from a representative dryer, and upon approval by DEQ, shall perform VOC performance testing in accordance with the approved test protocol.

4.10.3 Performance tests conducted to demonstrate compliance with this permit shall be performed in accordance with IDAPA 58.01.01.157, the Performance Testing General Provision, and the following requirements:

- The permittee shall operate the dryer to be tested at worst-case normal operating conditions as defined by IDAPA 58.01.01.157.
- The permittee shall observe visible emissions during each performance test run using methods specified in IDAPA 58.01.01.625.
- The permittee shall monitor and record finished potato production from the dryer, expressed as tons-per-hour, during each performance test run. Finished hourly potato production may be based on the average tons per hour over the 8-hour shift(s) during which testing occurred if it is approved by DEQ in the source test protocol.

[PROPOSED]

4.11 Performance Test Reports

4.11.1 A written report shall be submitted to DEQ in accordance with IDAPA 58.01.01.157.04 for any source test performed to satisfy a performance test requirement imposed by state or federal regulation, rule, permit, or consent decree, or to revise an emission factor or air pollution control device operating parameter limit.

4.11.2 The performance test report shall include a determination of any revisions to emission factors for dryer emissions, based upon the emissions measured during the test and the production data obtained during the test. ~~The performance test report shall also summarize the measurements of operating parameters for the associated air pollution control equipment during the test.~~

Comment [SN2]: Dryers do not have air pollution control equipment

4.11.3 Records of stack testing and the determination of emission factors shall be maintained for at least five years or until such time as a revised emission factor is established. Records may be maintained in electronic format.

[PROPOSED]

5. Boilers and Heaters

Process Description

5.1 Process Description

Boiler No. 1 and Boiler No. 2 provide process steam used for potato peeling, blanching, drying, and frying. Boiler No. 1 is a Combustion Engineering boiler, Model No. 26-A-15 with a heat input capacity rated at 180 MMBtu/hr. Boiler No. 1 is subject to 40 CFR 60 Subpart Db. Boiler No. 2 is a Murray Trane boiler, Model No. MCF4-57, with a heat input capacity rated at 72 MMBtu/hr.

The Effluent Heater functions as a water heater that utilizes natural gas and/or biogas generated by the digester located adjacent to the potato processing plant. The Effluent Heater is an American Heating Co. model AHC-1500 with a heat input capacity rated at 19 MMBtu/hr.

The permittee also operates multiple heaters and burners at the facility for space heating.

Table 5.1 identifies the emission units, fuel specifications, control devices, emission points, and applicability to NSPS requirements.

Table 5.1 Boilers and Heaters Equipment Description

Emissions Units / Processes	Fuel Specifications	Control Devices	Emission Points	NSPS Applicability
Boiler No. 1	Natural gas and/or biogas	None	Boiler No. 1 exhaust stack	Subpart Db
Boiler No. 2	Natural gas	None	Boiler No. 2 exhaust stack	n/a due to installation date
Effluent Heater	Natural gas and/or biogas	None	Effluent Heater exhaust stack	Subpart Dc
Miscellaneous Heaters & Burners	Natural gas	None	Throughout facility	n/a

5.2 Emissions Control Description

Emissions from the Boiler No. 1, Boiler No. 2, Effluent Heater, and miscellaneous heaters and burners are uncontrolled.

Emissions Limits

5.3 Emission Limits

The emissions from Boiler No. 1, Boiler No.2, Effluent Heater, and miscellaneous heaters & burners shall not exceed any emissions rate limit in Appendix A of this permit.

[PROPOSED]

Operating Requirements

5.4 Allowable Fuel Types and Maximum Heat Rates

Allowable fuel types and maximum heat rates for boilers and heaters are identified in Table 5.2.

Table 5.2 Maximum Heat Rates and Allowable Fuel Types for Boilers and Heaters

Source	Heat Rate, MMBtu/hr	Allowable Fuels
Boiler No. 1	180	Natural gas and/or biogas
Boiler No. 2	72	Natural gas
Effluent Heater	19	Natural gas and/or biogas
Miscellaneous Heaters (aggregate)	109	Natural gas

[PROPOSED]

5.5 Biogas Use Limit

Facility-wide biogas use shall not exceed 147.0 MMscf per any consecutive 12-month period. This includes the biogas usage at both the potato process plant and the wastewater treatment plant flare.

[PROPOSED]

Monitoring and Recordkeeping Requirements

5.6 Biogas Use Monitoring

The permittee shall monitor and record the facility-wide biogas usage every month. This monthly facility-wide biogas usage shall be added to the previous consecutive 11-month biogas usage to demonstrate compliance with the Biogas Use Limit permit condition.

[PROPOSED]

5.7 Biogas H_2S Concentration Monitoring

The permittee shall measure the H_2S concentration in ppmv of biogas combusted in Boiler No. 1 and/or the Effluent Heater on a daily basis. The H_2S concentration is based on the daily average of H_2S concentration measurements collected at the wastewater treatment plant digester.

[May 4, 2012]

5.8 Biogas SO_2 Emissions Monitoring

The permittee shall calculate and record SO_2 emissions as specified below.

The monthly volume weighted average H_2S Concentration, in ppmv, shall be calculated as follows:

Monthly Volume Weighted Average H_2S Concentration (ppmv) = $\sum_{month}$[Daily Average of Measured H_2S Concentration (ppmv) x Volume of Total Biogas Combusted That Day (scf)] ÷ Monthly Sum of Total Biogas Combusted That Month (scf)

To demonstrate compliance with the hourly emissions limit for equipment that combusts biogas, SO_2 emissions, in pounds per hour, shall be calculated as follows:

SO_2 Emissions (lb/hr) = 0.166 * (Daily Measured H_2S Concentration (ppmv)) x (Maximum Volume of Biogas Combusted in Any Hour That Day (MMscf)

[PROPOSED]

Performance Testing Requirements

5.9 CO Performance Test

When actual facility-wide CO reaches 70 T/yr, the permittee shall perform a source test to develop/verify the CO EF for Boiler No. 1. The permittee shall revise facility-wide CO emissions calculations and CO emissions calculations for Boiler No. 1 if the new CO EF is higher than the one in Permit Condition 2.19. The new CO EF shall be effective from the date of the test.

[PROPOSED]

5.10 CO Performance Test

5.10.1 The permittee shall measure CO emissions from Boiler No. 1 using approved EPA test methods, or other Department-approved alternative methods.

5.10.2 Performance tests conducted to demonstrate compliance with this permit shall be performed in accordance with IDAPA 58.01.01.157, the Performance Testing General Provision, and the following requirements:

- The permittee shall operate Boiler No. 1 to be tested at worst-case normal operating conditions as defined by IDAPA 58.01.01.157.
- The permittee shall monitor and record Boiler No. 1 natural gas usage in MMscf.

[PROPOSED]

5.11 CO Performance Test Report

5.11.1 A written report shall be submitted to DEQ in accordance with IDAPA 58.01.01.157.04 for any source test performed to satisfy a performance test requirement imposed by state or federal regulation, rule, permit, or consent decree or to revise an emission factor.

5.11.2 The performance test report shall include a determination of any revisions to Boiler No. 1 CO emission factor, based upon the CO emissions measured during the test and the natural gas usage for Boiler No. 1 obtained during the test.

[PROPOSED]

40 CFR 60 Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units – Apply to Boiler No. 1

5.12 NSPS – Subpart Db New Source Performance Standard – Nitrogen Oxide Standards

In accordance with 40 CFR 60.44b(a)(1)(ii), 60.44b(h), and 60.44b(i), the permittee shall not cause to be discharged into the atmosphere any gases that contain nitrogen oxides (expressed as NO_2) in excess of 0.2 lb/MMBtu. This nitrogen oxide standard applies at all times including periods of startup, shutdown, or malfunction. Compliance with this emission limit is determined on a 30-day rolling average basis.

5.13 NSPS – Subpart Db New Source Performance Standard – Fuel Monitoring

In accordance with 40 CFR 60.49b(d), the permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas and biogas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. These records shall be kept on site for the most recent five years period and shall be made available in either hard copy or electronic format to DEQ representatives upon request.

5.14 NSPS – Subpart Db Nitrogen Oxides Continuous Emissions Monitoring

The permittee shall fully comply with all monitoring requirements established by 40 CFR 60 Subpart A – *General Provisions* and Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* (40 CFR 60.40b). In particular, the permittee shall install, certify, operate, and maintain, in accordance with all the requirements of 40 CFR 60.48b, a NO_X continuous emissions monitoring system (CEMS) with an automated data acquisition and handling system for measuring and recording NO_X concentration (in parts per million) and NO_X emission rate (in pounds per million British thermal units) from the boiler stack.

The permittee shall fully comply with all applicable record keeping requirements set forth in 40 CFR 60, Subpart Db. All such records shall be made available in either hard copy or electronic format to DEQ representatives upon request.

5.15 NSPS – Subpart Db Required Nitrogen Oxide Continuous Emission Monitoring System Information

The permittee shall fully comply with the reporting requirements set forth in 40 CFR 60, Subpart Db. In accordance with 40 CFR 60.49b, copies of all certification or recertification notifications, certification or recertification applications, and monitoring plans shall be submitted to DEQ. Furthermore, the permittee shall submit to DEQ a written report (including all raw field data, etc.) for each certification or recertification test required.

Each report shall be submitted to DEQ within 30 days of the date on which the respective test was completed.

5.16 NSPS – Subpart Db Quality Assurance Procedures

The permittee shall follow quality assurance (QA) procedures in accordance with 40 CFR 60, Appendix F and submit the QA results to DEQ for approval within 30 days after the test date.

The permittee shall submit a written notification of the QA tests to DEQ within 30 days prior to performing each respective test.

5.17 NSPS – Subpart Db Excess Nitrogen Oxide Emissions

The permittee shall submit to DEQ copies of all excess emissions and monitoring systems performance reports and/or summary reports for the NO_X CEMS. The reporting requirements and report format shall be the same as those specified in 40 CFR 60.7(b) through (d) and IDAPA 58.01.01.131. For NO_X emissions from the boiler stack, periods of excess emissions are any and all 24-hour rolling average NO_X concentrations as measured by the NO_X CEMS that exceed the allowable NO_X concentration of 0.2 lb/MMBtu.

40 CFR 60 Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units – Apply to Effluent Heater

5.18 NSPS – Subpart Dc Applicability, Notification, Monitoring, and Reporting Requirements

In accordance with 40 CFR 60.48c(a), the permittee shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup as required by 40 CFR 60.7 for the boilers.

The notification shall include the following:

- The design heat input capacity of the affected facility,
- Fuels to be combusted in the affected facility,
- The annual capacity factor at which the permittee anticipates operating the affected facility based on all fuels fired and based on each fuel fired.

Notification shall be submitted to EPA and DEQ.

U.S. EPA – Region 10
Office of Air Quality
1200 Sixth Avenue
Seattle, WA 98101
Phone: (206) 553-1200

Air Quality Permit Compliance
Twin Falls Regional Office
Idaho Department of Environmental Quality
650 Addison Ave. West, Suite 110
Twin Falls, ID 83301
Phone: (208) 736-2190

[May 4, 2012]

5.19 NSPS – Subpart Dc Recordkeeping Requirements

In accordance with 40 CFR 60.48c(g) and 40 CFR 60.48c(i), the permittee shall record and maintain records of the amount of each fuel combusted during each operating day by the Effluent Heater boiler.

As an alternative to meeting the daily requirements, the permittee may elect to record and maintain records of the amount of each fuel combusted by the Effluent Heater boiler during each calendar month.

As an alternative to meeting the daily requirements, the permittee may elect to record and maintain records of the total amount of fuel delivered to that property during each calendar month.

[May 4, 2012]

6. L4 AND L1 EMERGENCY DIESEL-FIRED INTERNAL COMBUSTION ENGINES

Process Description

6.1 Process Description

The compression ignition IC engines at the facility are used to provide electrical power to the facility when electrical line power is not available during emergency situations.

6.2 Control Descriptions

Table 6.1 L4 and L1 EMERGENCY DIESEL-FIRED IC ENGINES DESCRIPTION

Emissions Units / Processes	Control Devices	Emission Points
L4 Emergency IC Engine	None	L4 Emergency IC engine exhaust stack
L1 Emergency IC Engine	None	L1 Emergency IC engine exhaust stack

Emissions Limits

6.3 Emission Limits

The emissions from the L4 and L1 Emergency IC Engines stacks shall not exceed any emissions rate limit in Appendix A of this permit.

[May 4, 2012]

Operating Requirements

6.4 Hours of Operation Limitation

- Each emergency IC engine shall not be operated for more than 8.5 hours per day, except during emergency situations.
- Each emergency IC engine shall not be operated for more than 52 hours per any consecutive 12-month period, except during emergency situations.

6.5 Fuel Specification

The emergency IC engines shall only be fired on No. 2 diesel fuel. The fuel sulfur content shall not exceed 0.5 percent by weight, as required by IDAPA 58.01.01.725.

6.6 Maintenance and Operating Requirements

The permittee shall maintain and operate the emergency generators in accordance with manufacturer recommendations.

Monitoring and Recordkeeping Requirements

6.7 Emergency IC Engine Operations

The permittee shall monitor and record the date and the number of hours of operation for each emergency IC engine to demonstrate compliance with the Hours of Operation Limitation permit condition. These records shall remain on site for the most recent five years period and shall be made available to DEQ representatives upon request.

40 CFR 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

6.8 NESHAP – Subpart ZZZZ L4 Emergency IC Engine and L1 Emergency IC Engine NESHAP Compliance Date

In accordance with 40 CFR 63.6595, the permittee shall comply with the applicable emission limitations and operating limitations requirements of 40 CFR 63, ZZZZ for Stationary Reciprocating Internal Combustion Engines, no later than May 3, 2013.

[May 4, 2012]

6.9 NESHAP – Subpart ZZZZ L4 Emergency IC Engine and L1 Emergency IC Engine Maintenance Requirements

In accordance with 40 CFR 63.6603, on and after May 3, 2013, for the L4 Emergency IC Engine and L1 Emergency IC Engine the Permittee shall:

- Change the oil and filter every 500 hours of operation or annually, whichever comes first.
- Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first.
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[May 4, 2012]

6.10 NESHAP – Subpart ZZZZ L4 Emergency IC Engine and L1 Emergency IC Engine Alternative Maintenance Requirements

In accordance with 40 CFR 63.6625(i), on and after May 3, 2013, the permittee has the option of implementing an oil analysis program to extend the oil change frequency specified in the L4 Emergency IC Engine and L1 Emergency IC Engine Maintenance Requirements permit condition. The oil analysis must be performed at the same frequency as specified in the L4 Emergency IC Engine and L1 Emergency IC Engine Maintenance Requirements permit condition. The oil analysis program must, at a minimum, analyze the following three parameters:

- Total Base Number, viscosity, and percent water content.

The limits for these parameters are as follows:

- A Total Base Number of less than 30% of the Total Base Number of the oil when new; the viscosity of the oil has changed by more than 20% from the viscosity of the oil when new; or the water content is greater than 0.5% (by volume).

If any of the limits are exceeded, and the IC engine is in operation, the Permittee must change the oil within two days of receiving the results of the analysis. If any of the limits are exceeded, and the IC engine is not in operation, the Permittee must change the oil within two days or before commencing operation of the IC engine, whichever is later.

The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the IC engine. The analysis program must also be part of the maintenance plan for the engine.

[May 4, 2012]

6.11 NESHAP – Subpart ZZZZ L4 Emergency IC Engine and L1 Emergency IC Engine Startup Requirements

In accordance with 40 CFR 63.6603, on and after May 3, 2013, for the L4 Emergency IC Engine and L1 Emergency IC Engine the Permittee shall:

- Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

[May 4, 2012]

6.12 NESHAP – Subpart ZZZZ L4 Emergency IC Engine and L1 Emergency IC Engine Operation and Maintenance Requirements

In accordance with 40 CFR 63.6625, on and after May 3, 2013, for the L4 Emergency IC Engine and L1 Emergency IC Engine the Permittee shall:

- The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[May 4, 2012]

6.13 NESHAP – Subpart ZZZZ L4 Emergency IC Engine and L1 Emergency IC Engine Hour Meter Requirement

In accordance with 40 CFR 63.6625(f), on and after May 3, 2013, the permittee must install a non-resettable hour meter on the L4 Emergency IC Engine and L1 Emergency IC Engine if one is not already installed

[May 4, 2012]

6.14 NESHAP – Subpart ZZZZ L4 Emergency IC Engine and L1 Emergency IC Engine Operating Requirements

In accordance with 40 CFR 63.6640(f), on and after May 3, 2013, the L4 Emergency IC Engine and L1 Emergency IC Engine shall be operated as follows:

- There is no time limit on the use of the L4 Emergency IC Engine and L1 Emergency IC Engine in emergency situations.
- The permittee may operate the L4 Emergency IC Engine and L1 Emergency IC Engine for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engines. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of the L4 Emergency IC Engine and L1 Emergency IC Engine beyond 100 hours per year.
- The permittee may operate the L4 Emergency IC Engine and L1 Emergency IC Engine up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for the facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that the permittee may operate the L4 Emergency IC Engine and L1 Emergency IC Engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The L4 Emergency IC Engine and L1 Emergency IC Engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation

are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this requirement, as long as the power provided by the financial arrangement is limited to emergency power.

[May 4, 2012]

6.15 NESHAP – Subpart ZZZZ L4 Emergency IC Engine and the L1 Emergency IC Engine Recordkeeping Requirements

In accordance with 40 CFR 63.6655 and 40 CFR 63.6660, on and after May 3, 2013, the permittee shall maintain records for the L4 Emergency IC Engine and the L1 Emergency IC Engine according to the requirements of 40 CFR 63, ZZZZ for Stationary Reciprocating Internal Combustion Engines. The records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

- The permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- The permittee shall keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[May 4, 2012]

7. Biogas Flare

Process Description

7.1 Process Description

The primary purpose of the emissions unit is to combust the gas, which contain H_2S, produced by the anaerobic digesters that treat wastewater from potato processing.

7.2 Control Descriptions

The emissions from the flare are uncontrolled.

Emissions Limits

7.3 Emission Limits

The emissions from the biogas flare shall not exceed any emissions rate limit in Appendix A of this permit.

Operating Requirements

7.4 Pilot Flame and Alarm System on Flare

The flare shall be operated with a pilot flame present at all times while receiving off-gasses due to the operation of the digester. The permittee shall install an alarm system on the flare to notify operating personnel in case of a flare flame-out. The flare shall be re-ignited as expeditiously as practicable. The permittee shall maintain records onsite of the time and duration of all flame-out periods for the most recent five-year period.

Monitoring and Recordkeeping Requirements

7.5 Biogas Flow and H_2S Concentration Monitoring

The permittee shall ensure a biogas flowmeter and H_2S gas monitor have been installed, calibrated, and are operational. The flowmeter and H_2S monitor shall be placed after the digester and prior to the biogas flare.

The permittee shall monitor and record the biogas flow and the H_2S concentration on a weekly basis. A compilation of the most recent five years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

The permittee shall use the biogas flow rate and the H_2S concentration results to calculate the annual SO_2 and CO emissions from the combustion of biogas each month for the preceding 12- month period. A compilation of the most recent five years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

Reporting Requirements

7.6 Flame-outs and Odor Complaints

The permittee shall notify the DEQ's Twin Falls Regional Office within one hour of any flare flame-out. The permittee shall submit semiannual reports to the Department by January 15 and July 15 of each year summarizing the occurrences of flare flame-outs, odor complaints, and corrective actions taken during the period.

8. General Provisions

General Compliance

8.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the "Rules for the Control of Air Pollution in Idaho." The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the "Rules for the Control of Air Pollution in Idaho," and the Environmental Protection and Health Act (Idaho Code §39-101, et seq.)

[Idaho Code §39-101, et seq.]

8.2 The permittee shall at all times (except as provided in the "Rules for the Control of Air Pollution in Idaho") maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

8.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

8.4 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee's premises where an emissions source is located, emissions-related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

8.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

8.6 The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;
- A notification of the date of any suspension of construction, if such suspension lasts for one year or more;
- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and

- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

8.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

8.8 All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

8.9 Within 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00 and 4/11/15]

Monitoring and Recordkeeping

8.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

8.11 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

Certification

8.12 All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

8.13 No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

8.14 No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

8.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

8.16 The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]

Appendix A – Emissions Limits

EMISSIONS LIMITS[a]										
	PM10[b]		NOx		SO_2		CO		VOC[f]	
Emissions Unit	lb/day[c]	ton/yr[d]	lb/hr	ton/yr[d]	lb/hr	ton/yr[d]	lb/hr	ton/yr[d]	lb/hr	ton/yr[d]
L1-SP Fryer	125.9	23.01	-	-	-	-	-	-	-	-
Line 2 Fryer	96.2	11.00	-	-	-	-	-	-	-	-
Line 4 Fryer	164.4	30.04	-	-	-	-	-	-	-	-
Line 1 Dryer	37.4	6.21	3.53	15.46	0.02	0.09	2.96	12.99	-	-
Line 2 Dryer	26.2	4.36	0.39	1.72	2.35E-03	0.0103	0.33	1.44	-	-
Line 4 Dryer	46.3	7.68	2.70	11.81	0.02	0.07	2.26	9.92	-	-
Special Products Dryer	6.3	1.04	0.49	2.15	2.94E-03	0.01	0.41	1.80	-	-
Boiler 1	36.24	5.87	14.78	64.72	0.11[e]	0.46[e]	5.86	25.66	-	-
Boiler 2	12.89	2.35	7.06	30.92	0.04	0.19	5.93	25.97	-	-
Boiler No. 1 and Boiler No. 2, combined	-	5.89	-	-	-	-				
Effluent Heater	4.06	0.74	1.86	8.16	-	-	1.56	6.85	-	-
Miscellaneous Heaters and Burners	19.68	3.59	10.69	46.81	-	-	8.98	39.32	-	-
Biogas (when burned in Boiler No. 1 and/or the Effluent Heater)	-	-	-	-	20.54	74.60	-	-	-	-
Biogas Flare	-	-	1.10	4.00	20.54	81.20	5.01	19.10	-	-
230K genset	6.64	0.02	11.01	0.29	0.73	0.02	2.37	0.06	-	-
100K genset	3.10	0.01	5.15	0.13	0.34	0.01	1.11	0.03	-	-
Facility Wide Emissions	-	90.8	-	97.7	-	75.2	-	81.9	-	99.0

(a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and record keeping requirements.
(b) Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
(c) Pounds per day based on 24-hr average hourly emission as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.
(d) Tons per any consecutive 12 calendar month period.
(e) For emissions from natural gas combustion.

Statement of Basis

Permit to Construct No. P-2011.0120
Project ID 61528

Lamb Weston, Inc. - Twin Falls Plant

Twin Falls, Idaho

Facility ID 083-00062

Proposed for Public Comment

February 9, 2018
Shawnee Chen, P.E.
Senior Air Quality Engineer

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01.et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AAC	acceptable ambient concentrations
AACC	acceptable ambient concentrations for carcinogens
acfm	actual cubic feet per minute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
Bhp	brake horsepower
BMP	best management practices
Btu	British thermal units
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS No.	Chemical Abstracts Service registry number
CBP	concrete batch plant
CEM	continuous emission monitoring
CEMS	continuous emission monitoring systems
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CI	compression ignition
CMS	continuous monitoring systems
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalent emissions
COMS	continuous opacity monitoring systems
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
FEC	Facility Emissions Cap
GACT	Generally Available Control Technology
GHG	greenhouse gases
gph	gallons per hour
gpm	gallons per minute
gr	grains (1 lb = 7,000 grains)
HAP	hazardous air pollutants
HHV	higher heating value
HMA	hot mix asphalt
hp	horsepower
hr	hour
hr/yr	hours per consecutive 12 calendar month period
IC	internal combustion
ICE	internal combustion engines
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
iwg	inches of water gauge
km	kilometers
lb/hr	pounds per hour
lb/qtr	pound per quarter
L1	Line 1
L1-SP	Line 1 and Specific Products
L2	Line 2
L4	Line 4
m	meters

MACT	Maximum Achievable Control Technology
mg/dscm	milligrams per dry standard cubic meter
MMBtu	million British thermal units
MMscf	million standard cubic feet
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
NSR	new source review
O&M	operation and maintenance
O_2	oxygen
PAH	polyaromatic hydrocarbons
PC	permit condition
PCB	polychlorinated biphenyl
PERF	Portable Equipment Relocation Form
PM	particulate matter
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
POM	polycyclic organic matter
ppm	parts per million
ppmw	parts per million by weight
PSD	Prevention of Significant Deterioration
psig	pounds per square inch gauge
PTC	permit to construct
PTC/T2	permit to construct and Tier II operating permit
PTE	potential to emit
PW	process weight rate
RAP	recycled asphalt pavement
RFO	reprocessed fuel oil
RICE	reciprocating internal combustion engines
Rules	Rules for the Control of Air Pollution in Idaho
scf	standard cubic feet
scfh	standard cubic feet per hour
SCL	significant contribution limits
SIP	State Implementation Plan
SM	synthetic minor
SM80	synthetic minor facility with emissions greater than or equal to 80% of a major source threshold
SO_2	sulfur dioxide
SO_X	sulfur oxides
SP	Special Product
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
T2	Tier II operating permit
TAP	toxic air pollutants
TEQ	toxicity equivalent
T-RACT	Toxic Air Pollutant Reasonably Available Control Technology
ULSD	ultra-low sulfur diesel
U.S.C.	United States Code
VOC	volatile organic compounds
yd^3	cubic yards
$\mu g/m^3$	micrograms per cubic meter

FACILITY INFORMATION

Description

The Lamb Weston, Inc. Twin Falls Plant (the facility) has a raw potato processing facility. The facility processes raw potatoes into frozen, fried, hash brown, mashed, and special potato products for consumer sales. The facility has four direct-fired dryers, four fryers that use steam from two boilers for heat, a natural gas or biogas-fired water heater, two emergency diesel-fired internal combustion (IC) engines, and miscellaneous heaters and burners.

Lamb Weston, Inc. Twin Falls PlantThe facility also has a wastewater process water treatment plant with two anaerobic digesters and a flare. The wastewater treatment plant treats wastewater process water from the raw potato processing facility. In 2017, Lamb Weston Inc. acquired the digester anaerobic treatment plant from the that was previous owned by City of Twin Falls.

Because the two facilitiespotato processing operation and the process water treatment operation have the same owner, and are adjacent to each other, and because the digester process water treatment activity supports is a supporting facility to the potato processing plantactivities, these two facilities operations are considered as one facility for the Title V program and new source review (NSR) program.

Permitting History

The following information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

Lamb Weston, Inc. – Potato processing plant

May 4, 2012	P-2011.0120, project 60909, removing a Facility Emissions Cap (FEC), creating a facility-wide limit on CO_2e emissions, and removing diesel and vegetable oil as allowable fuels in Boilers No. 1 and 2. No modeling was done. (A, but will become S upon issuance of this permit).
June 20, 2010	P-2009.0093, allowing burning biogas in Boiler No. 1, but the total amount of biogas allowed to be burned at the facility is still kept the same, SO_2 emissions were modeled. The SO_2 impact from the facility was about 95% of 24-hr NAAQS, 81% of 3-hr NAAQS, and 62% of annual NAAQS, Permit status (S)
June 4, 2007	Tier II operating permit No. T2-050420, placing the facility under an FEC, PM_{10} emissions were modeled. The impact was 97% of NAAQS for both 24-hr and annual averaging time, Permit status (S)
March 8, 2005	Tier II operating permit No. T2-040422, facility name change, Permit status (S)
April 1, 2003	Tier II operating permit No. T2-020425, changing reporting due dates, Permit status (S)
May 24, 2002	Tier II operating permit No. 083-00062, installing a natural gas or biogas-fired water heater, allowing burning diesel and cooking oil in the boilers, removing Boiler No.1 restriction and re-rating back to its design capacity and installing a NO_X CEMS, emissions of SO_2, PM_{10} and annual NOx were modeled facility-wide. Permit status (S)
October 17, 2000	Tier II operating permit No. 083-00062, limiting PTE below major source thresholds to avoid subject to Title V program, derating Boiler No.1, and issuing an initial air permit for emissions units installed without obtaining PTCs, PM_{10} and NOx were modeled facility-wide. Permit status (S)
August 1, 1994	Lamb Weston Inc. merged with Universal Frozen Foods. The air permit process was initiated shortly thereafter.

Lamb Weston, Inc. – Wastewater treatment plant (Previous Facility ID: 083-00085)

May 12, 2017	P-2017.0026 project 61881, ownership change from City of Twin Falls to Lamb Weston, Inc. (A, but will become S upon issuance of this permit)
May 28, 2002	P-000417, 083-00085, initial PTC for an existing flare used to burn biogas from anaerobic digesters at the wastewater treatment plant. (S)

Application Scope

- The main purpose for this permitting action is to revise the existing PTC No. P-2011.0120 project 60909 issued on May 4, 2012 as required by the consent order signed on September 9, 2014. Specifically, this PTC addresses the requirements under item 12A of the consent order.
- In addition, the applicant has proposed the following changes through this permitting action:
  - Improve the performance of the air washers serving Line 2 Fryer and Line 4 Fryer~~s~~. The planned improvements include:
    - Optimizing air flow and level of water saturation in the exhaust air stream.
    - Installing additional mist eliminators (vane separators & mesh pads) in the air washers~~, and~~.
    - Optimizing water sprays within the air washers.
    - Increasing the~~e~~ Line 4 Fryer stack height to 50 feet.
  - Replace the air washers for the Line 1 (L1) Fryer and Special Products (SP) Fryer with a Venturi scrubber. The scrubber will combine the exhausts from the Line 1 and SP fryers into a single 50-foot tall stack at the same location as the existing Line 1 Fryer stack. The existing Line 1 Fryer and SP Fryer stacks will be eliminated.
- This permitting action integrates the PTC for the biogas flare of the adjacent anaerobic ~~wastewater~~ process water treatment ~~facility~~ plant into this PTC because Lamb Weston, Inc. has owned and operated the anaerobic ~~wastewater~~ treatment ~~facility~~ plant since May 2017. Both plants are considered as one facility for NSR program and for Title V program purposes.
- This PTC includes facility-wide emissions limits to keep the facility as a minor source to avoid being subject to Title V program (i.e., Tier I operating permitting program).
- The applicant has requested ~~a VOC emissions increase~~ increased VOC emissions limits for the fryers due to the ~~higher~~ greater ~~new~~ VOC EF obtained from the 2014 source test and due to the potential dryer~~s~~[2] throughput increases.
- The applicant has also requested substantial changes to the existing permit, such as compliance demonstration methods ~~changes~~. Detailed discussions of the changes can be found in Permit Conditions Review section.

Application Chronology

September 9, 2014	DEQ signed the consent order, which required submittal of an application for revision of the existing PTC~~included that a PTC revision was required~~ (Enforcement Case No. E-2013.0014).
June 2, 2015	DEQ received an application and an application fee.
July 2, 2015	DEQ determined that the application was incomplete.
February 28, 2017	DEQ received a revised PTC application from the applicant.
March 27, 2017	DEQ determined that the application was incomplete.
March 24 & 25, 2017	DEQ received supplemental information from the applicant.
May 23, 2017	DEQ determined that the application was complete.

July 17 – August 1, Year	DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.
September 24, 2017	DEQ received a revised application that included the biogas flare of the anaerobic wastewater treatment plant
October 18, 2017	DEQ received a revised EI spreadsheet
November 8, 2017	DEQ made available the draft permit and statement of basis for peer and regional office review.
December 1, 2017	DEQ made available the draft permit and statement of basis for applicant review.
February XX – March XX, 2018	DEQ provided a public comment period on the proposed action.

TECHNICAL ANALYSIS

Emissions Units and Control Equipment

Table 1 EMISSIONS UNIT AND CONTROL EQUIPMENT INFORMATION [a]

Source ID No.	Sources	Control Equipment	Emission Point ID No.
Line 1 Fryer	Line 1 Fryer: Manufacturer: Heat and Control Installed/Modified: 1988 Finished Product Rate: 18.23 tons per hour (tons/hr) in 2012 permit, 30 tons/hr in the EI for this permitting action	Venturi Scrubber (L1-SP Scrubber): Manufacturer: SLY Inc. Model: Model 9 Pressure Drop Across Venturi Throat: 12-20 in H_2O in H_2O Water Flow Rate to Venturi Throat: 252 - 308 gpm	Venturi Scrubber Exhaust Height: 50 feet Diameter: 3.7 feet Stack Flow Rate: 29,455 acfm
Special Products Fryer	Special Products Fryer: Manufacturer: Heat and Control Installed/Modified: 1977 Finished Product Rate: 3.15 tons/hr in 2012 permit, 5 tons/hr in the EI for this permitting action.		
Line 2 Fryer	Line 2 Fryer: Manufacturer: Heat and Control Installed/Modified: 1970 Finished Product Rate: 17.93 tons/hr in 2012 permit, 42 tons/hr in the EI for this permitting action.	Air Washer: Manufacturer: Galbert Company Model: Custom Pressure Drop: NA Water Flow Rate: 134 gpm	Air Washer Stack Height: 55 feet Diameter: 3.00 feet Stack Flow Rate: 18,060 acfm
Line 4 Fryer	Line 4 Fryer: Manufacturer: Heat and Control Installed/Modified: 1989 Finished Product Rate: 26.58 tons/hr in 2012 permit, 37 tons/hr in the EI for this permitting action.	Air Washer: Manufacturer: Rico Model: Custom Pressure Drop: NA Water Flow Rate: 146 gpm	Air Washer Stack Height: 50 feet Diameter: 3.1 feet Stack Flow Rate: 19,938 acfm
Line 1 Dryer	Line 1 Dryer: Manufacturer: National Installed/Modified: 1986 Finished Product Rate: 18.2 tons/hr in 2012 permit, 30 tons/hr in the EI for this permitting action. Rated Burner Capacity: 36.0 MMBtu/hr Fuel: natural gas only	None	Four Stacks, each with: Exit Height: 45 ft (13.72 m) Exit Diameter: 2.76 ft (0.84 m) Exit Flow Rate: 25,000 acfm Exit Temperature: ~~108~~ 100 °F (~~42.2~~37.8 °C)

Comment [A1]: Stack data from modeling for 2007 permit

Source ID No.	Sources	Control Equipment	Emission Point ID No.
Line 2 Dryer	Line 2 Dryer: Manufacturer: National Installed/Modified: 1988/2002 Finished Product Rate: 17.93 tons/hr in 2012 permit, 42 tons/hr in the EI for this permitting action. Rated Burner Capacity: 4.0 MMBtu/hr Fuel: natural gas only	None	Seven~~S~~ stacks, ~~each with~~: Height: Stack 1: 38 feet Stacks 2-7: 35.~~75~~ 8 feet (max) Diameter (all): 2.~~25~~ 26 feet ~~Dimensions (1): 1.7 x 2.5 feet~~ ~~Diameter (2-4): 2.4 feet~~ ~~Diameter (5-7): 2.1 feet~~ Flow Rate: Stack 1: 11,839 acfm Stacks 2-7: ~10,~~267~~395 acfm Exit Temperature: ~~200~~ 100 °F (~~93.3~~ ~~°~~37.8 C)
Line 4 Dryer	Line 4 Dryer: Manufacturer: National Installed/Modified: 1989 Finished Product Rate: 26.6 tons/hr in 2012 permit, 37 tons/hr in the EI for this permitting action. Rated Burner Capacity: 27.5 MMBtu/hr Fuel: natural gas only	None	Five Stacks: Height: 44 feet (stack 1) Height: 36 feet (stacks 2 thru 5) Diameter: 3.9~~1~~ feet ~~Dimensions: 3.4 x 2.3 feet~~ Exit Flow Rate (each stack): 22,~~250~~ 175 acfm Exit Temperature: ~~121~~ 100 °F (~~49.4~~ ~~°~~37.8 C)
Special Products Dryer	Special Products Dryer: Manufacturer: B Eagle Installed/Modified: 1976/2007 Finished Product Rate: 3.2 tons/hr in 2012 permit, 5 tons/hr in the EI for this permitting action. Rated Burner Capacity: 5.0 MMBtu/hr Fuel: natural gas only	None	Exit Height: 38 ft (11.58 m) Exit Diameter: 2.6~~1~~ ft (0.80 m) Exit Flow Rate: 8,~~133~~ 049 acfm Exit Temperature: 200 °F (93.3 °C)
Boiler No. 1	Boiler No. 1: Manufacturer: Combustion Engineering Model: 26-A-15 Installed/Modified: 1989 Maximum Fuel Throughput: 176,471 scf/hr natural gas Rated Burner Capacity: 180.0 MMBtu/hr Fuel: natural gas and/or biogas only	None	Exit Height: 46 ft (14.02 m) Exit Diameter: 6.0 ft (1.83 m) Exit Flow Rate: 34,304 acfm Exit Temperature: 600 °F (315.6 °C)
Boiler No. 2	Boiler No. 2: Manufacturer: Murray-Trane Model: MCF4-57 Installed/Modified: 1982 Maximum Fuel Throughput: 70,588 scf/hr natural gas Rated Burner Capacity: 72.0 MMBtu/hr Fuel: natural gas only	None	Exit Height: 40 ft (12.19 m) Exit Diameter: 4.0 ft (1.22 m) Exit Flow Rate: 25,327 acfm Exit Temperature: 590 °F (310.0 °C)
Effluent Heater	Effluent heater: Manufacturer: American Heating Co. Model: AHC-1500 Installed/Modified: 2002 Rated Burner Capacity: 19 MMBtu/hr Fuel: natural gas and/or biogas only	None	Exit Height: 42 ft (12.80 m) Exit Diameter: 2.17 ft (0.66 m) Exit Flow Rate: 4,048 acfm Exit Temperature: 400 °F (204.4 °C)
L4 Emergency IC Engine	L4 Emergency IC Engine: Manufacturer: Cummins Model: NT855C Manufacture Date: 1982 Max. power rating: 355 bhp (230 kw genset) Fuel: diesel Annual use limit: 52 hrs/yr	None	Exit Height: 7.0 ft (2.13 m) Exit Diameter: 0.5 ft (0.15 m) Exit Flow Rate: 2,370 acfm Exit Temperature: 970 °F (521.1 °C)

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Comment [A2]: Stack data from modeling for 2007 permit.

Comment [A3]: Stack data from modeling memo for 2007 permit.

Comment [A4]: Stack data from modeling memo for 2007 permit

Source ID No.	Sources	Control Equipment	Emission Point ID No.
L1 Emergency IC Engine	L1 Emergency IC Engine: Manufacturer: Cummins Model: 6BT5.9 G-2 Manufacture Date: 1997 Max. power rating: 166 bhp (100 kw genset) Fuel: diesel Annual use limit: 52 hrs/yr	None	Exit Height: 13.0 ft (3.96 m) Exit Diameter: 0.25 ft (0.08 m) Exit Flow Rate: 800 acfm Exit Temperature: 1,060 °F (571.1 °C)
Miscellaneous heaters and burners	Miscellaneous heaters and burners Combined Maximum Fuel Throughput: 106,667 scf/hr Combined Maximum Heat Input: 109 MMBtu/hr	None	N/A
Biogas Flare	Biogas Flare Manufacturer: Groth Corp. Model No.: 8391 Installed: 1991 Design Biogas Feed Rate: 13,500 scfh biogas The flare is rated at 13 MMBtu/hr	Uncontrolled	NA

[a] The footnote in 10/19/2017 EI states that the fryer and dryer production are Lamb Weston's assessment of possible operating rates for the lines and that since the new permit will not include production rate limits, those data are provided for information purposes only

Emissions Inventories

Potential to Emit

IDAPA 58.01.01 defines Potential to Emit as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state or federally enforceable. Secondary emissions do not count in determining the potential to emit of a facility or stationary source.

Uncontrolled Potential to Emit

Using the definition of Potential to Emit, uncontrolled Potential to Emit is then defined as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall **not** be treated as part of its design **since** the limitation or the effect it would have on emissions **is not** state or federally enforceable.

The uncontrolled Potential to Emit is used to determine if a facility is a "Synthetic Minor" source of emissions. Synthetic Minor sources are facilities that have an uncontrolled Potential to Emit for regulated air pollutants or HAPs above the applicable Major Source threshold without permit limits. Because the facility classification was previously determined for PTC No. P-2009.0093 dated January 14, 2010 and ~~becuase~~because this permitting action does not change facility's classification, the uncontrolled PTE will not be presented for this project.

Pre-Project Potential to Emit

Pre-project Potential to Emit is used to establish the change in emissions at a facility as a result of this project.

The following table presents the pre-project potential to emit for all criteria pollutants from all emissions units at the facility as submitted by the Applicant and verified by DEQ staff. The pre-project PTE is taken from the SOBs for the current or previous permits as described in the footnote of the following table.

Table 2 PRE-PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

	PM_{10}		SO_2		NOx		CO		VOC		Pb	
Emissions Activity	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Fryers[a]	16.11	64.05							9.05	35.96	-	

Emissions Activity	PM_{10}		SO_2		NOx		CO		VOC		Pb	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Dryers[b]												
Line 1 Dryer	1.34	5.9	0.02	0.09	3.53	15.46	2.96	12.99	0.19	0.85		
Line 2 Dryer	1.32	5.8	0.01	0.04	1.67	7.30	1.40	6.13	0.09	0.40		
Line 4 Dryer	1.95	8.6	0.02	0.07	2.70	11.81	2.26	9.92	0.15	0.65		
Special Products Dryer	0.23	1.0	0.00	0.01	0.49	2.15	0.41	1.80	0.03	0.12		
Dryers total:	4.84	19.29 [c]	0.05	0.21	8.39	36.72	7.03	30.84	0.46	2.02		
Boiler 1[b]	3.18	13.9	29.87	130.83	36.64	160.49	8.27	36.22	1.08	4.74		
Boiler 2[b]	1.21	5.3	3.73	16.34	13.85	60.65	5.93	25.97	0.39	1.70		
Effluent Heater [b],[c]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous Heaters and Burners	0.82	3.6	0.06	0.28	10.80	47.30	9.07	39.74	0.59	2.60		
Maximum Fuel Annual[e]		8.75		96.95		97.35		81.77		5.35		
Biogas Flare[d]	NA	NA	19.10	81.20	NA	NA	NA	NA	NA	NA	NA	NA
230K genset[a]	0.78	0.02	0.73	0.02	11.01	0.29	2.37	0.06	0.89	0.02		
100K genset[a]	0.37	0.01	0.34	0.01	5.15	0.13	1.11	0.03	0.42	0.01		
PTE[c]	26.68	92.11	34.78	96.98	85.82	97.74	33.79	81.87	12.86	41.34	NA	NA
Facility-Wide Emission Caps[c]	NA	92.1	NA	96.7	NA	97.7	NA	NA	NA	NA	NA	NA

[a] From PTC No. P-2011.0120 issued 5/4/2012
[b] From Statement of Basis for PTC No. P-2009.0093 issued 6/20/2010 "Controlled Emissions Estimates of Criteria Air Pollutants". (Limits from PTC No. P-2011.0120 not applicable because those limits were based on invalidated PSD threshold for GHG emissions.)
[c] Effluent Heater emissions are included in Boiler No. 1 and maximum fuel annual to avoid double-counting of emissions.
[d] From PTC No. P-2017.0026 issued to the wastewater treatment plant on 5/12/2017
[e] From PTC No. P-2009.0093 issued 6/20/2010 "Controlled Emissions Estimates of Criteria Air Pollutants". (Limits from Permit P2011.0120 are not applicable because those limits were based on invalidated PSD threshold for GHG emissions.)

Post Project Potential to Emit

Post project Potential to Emit is used to establish the change in emissions at a facility and to determine the facility's classification as a result of this project. Post project Potential to Emit includes all permit limits resulting from this project.

The following table presents the post project Potential to Emit for criteria pollutants from all emissions units at the facility as submitted by Applicant and reviewed and revised by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit. Additional discussions can be found under Permit Condition Review section of the SOB.

The consent order requires the applicant to submit a PTC application to replace the combined emissions limits in the 2012 permit with individual emissions limits for fryers, dryers, Boiler No. 1, and Boiler No. 2 ~~without changing the total combined emissions limits~~. DEQ determined that if the sum of the individual ~~emission~~ emissions limits proposed in the application was not greater than the combined limits in the existing permit for those stacks, then the PTC application would not be subject to New Source Review.

Table 3 POST PROJECT POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Emissions Activity	PM_{10}		SO_2		NOx		CO		VOC		Pb	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Process Operations	20.95	83.3	-	-	-	-	-	-	28.60	116.93	-	-
Fryers												
L1-SP Scrubber	5.25	23.0	-	-	-	-	-	-	15.1	65.98	-	-
Line 2 Fryer	4.01	11.0	-	-	-	-	-	-	5.8	16.86	-	-
Line 4 Fryer	6.85	30.0	-	-	-	-	-	-	7.8	34.08	-	-
Total for Fryers:	16.11	64.05	-	-	-	-	-	-	28.60	116.93 (52 [b])	-	-
Dryers												

Emissions Activity	PM_{10}		SO_2		NOx		CO		VOC		Pb	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Line 1 Dryer	1.56	6.2	-	-	-	-	-	-	-	0.00	-	-
Line 2 Dryer	1.09	4.4	-	-	-	-	-	-	-	0.00	-	-
Line 4 Dryer	1.93	7.7	-	-	-	-	-	-	-	0.00	-	-
Special Products Dryer	0.26	1.0	-	-	-	-	-	-	-	0.00	-	-
Total for Dryers:	4.84	19.29	-	-	-	-	-	-	-	0.00	-	-
Fuel Combustion												
Natural Gas												
Boiler 1	1.34	5.9	0.11	0.46	14.78	64.72	5.86	25.66	0.97	4.25	0.00	0.00
Boiler 2	0.54	2.3	0.04	0.19	7.06	30.92	5.93	25.97	0.39	1.70	0.00	0.00
Line 1 Dryer	Included in process emissions		0.02	0.09	3.53	15.46	2.96	12.99	0.19	0.85	0.00	0.00
Line 2 Dryer			0.00	0.01	0.39	1.72	0.33	1.44	0.02	0.09	0.00	0.00
Line 4 Dryer			0.02	0.07	2.70	11.81	2.26	9.92	0.15	0.65	0.00	0.00
Special Products Dryer			0.00	0.01	0.49	2.15	0.41	1.80	0.03	0.12	0.00	0.00
Effluent Heater (NG)	0.14	0.6	0.01	0.05	1.86	8.16	1.56	6.85	0.10	0.45	0.00	0.00
Miscellaneous Heaters and Burners	0.81	3.6	0.06	0.28	10.69	46.81	8.98	39.32	0.59	2.57	0.00	0.00
Total for Natural Gas:	2.83	12.40	0.27	1.17	41.49	181.73	28.30	123.95	2.44	10.69	0.00	0.00
Biogas												
Effluent Heater (BG)	0.15	0.6	20.50	74.60	2.02	7.35	1.70	6.17	0.11	0.40	0.00	0.00
Biogas Flare	0.15	0.6	20.50	81.20	1.10	4.00	5.98	19.10	10.67	38.81	0.00	0.00
Total for Biogas (Max of Effluent Heater or Biogas Flare)	0.15	0.6	20.50	81.2	2.02	7.4	5.01	19.1	10.67	38.81	0.00	0.00
Diesel												
230K genset	0.78	0.02	0.73	0.02	11.01	0.29	2.37	0.06	0.89	0.02	0.00	0.00
100K genset	0.37	0.01	0.34	0.01	5.15	0.13	1.11	0.03	0.42	0.01	0.00	0.00
Total for Diesel:	1.15	0.0	1.07	0.03	16.15	0.42	3.48	0.09	1.31	0.03		
Facility-Wide Potential to Emit	25.08	96.3	21.84	82	59.66	190	36.79	143	43.01	166 (102 [b])	0.00	0.00
Proposed Facility Emissions Limits		90.8		75.2		97.7		81.9		99		

[a] Maximum fuel combustion emissions assume all biogas is flared.
[b] The values in the parenthesis are based on fryers' production rates in 2012 permit and using the new VOC EFs based on 2014 source test data

Change in Potential to Emit

The change in facility-wide potential to emit is used to determine if a public comment period may be required and to determine the processing fee per IDAPA 58.01.01.225. The following table presents the facility-wide change in the potential to emit for criteria pollutants.

Table 4 CHANGES IN POTENTIAL TO EMIT FOR REGULATED AIR POLLUTANTS

Source	$PM_{10}/PM_{2.5}$		SO_2		NO_X		CO		VOC	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Pre-Project Potential to Emit	26.68	92.11	34.78	96.7	85.82	97.7	33.79	81.9	12.86	41.34
Post Project Potential to Emit	25.08	90.8	21.84	75.2	59.66	97.7	36.79	81.9	43.01	99
Changes in Potential to Emit	**-1.60**	**-1.31**	**-12.94**	**-21.50**	**-26.16**	**0.00**	**3.00**	**0.00**	**30.15**	**57.66**

TAP Emissions

Historical, only toxic air pollutants emitted from fuel combustions are reviewed and analyzed for potato processing facilities for permitting purpose. Recent internet search reveals that TAP could be emitted from frying food or frying oil at high temperature. Currently, it is not clear whether TAP would emit from the potato fryers at potato processing plants and if emitted, at what level.~~,~~ T~~t~~herefore this permitting action will not look at TAPs from potato dryers until the potato processing industry and DEQ have better understanding of TAP emissions from industrial potato fryers.

Because no changes are made to the combustion units at the facility and consequently TAP emissions do not change; therefore, TAP analysis is not required for this permitting action.

Ambient Air Quality Impact Analyses

The applicant has proposed to change the control devices of the fryers and the fryers exhaust~~ing configurations~~ parameters as described under Application Scope section. The fryers emit PM and VOC.

The applicant provided an analysis of potential PM_{10} ambient impacts resulting changes in fryer stack exhaust parameters due to the modifications to fryer air emissions controls. Because the PM_{10} ambient impact ~~of this permitting action for PM_{10} iss~~ are less than the significant impact levels as defined in the Rules, according to the State of Idaho Air Quality Modeling Guideline[1], ~~the~~ a full modeling analysis is not ~~performed~~required. According to DEQ's modeling memo, the applicant has demonstrated pre-construction compliance to DEQ's satisfaction that emissions from this facility will not cause or significantly contribute to a violation of any ambient air quality standard.

An ambient air quality impact analyses document has been ~~crafted~~ completed by DEQ based on a review of the modeling analysis submitted in the application. That document is part of the final permit package for this permitting action (see Appendix B).

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

The facility is located in Twin Falls County, which is designated as attainment or unclassifiable for $PM_{2.5}$, PM_{10}, SO_2, NO_2, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

Facility Classification

The AIRS/AFS facility classification codes are as follows:

For HAPs (Hazardous Air Pollutants) Only:

A = Use when any one HAP has actual or potential emissions ≥ 10 T/yr or if the aggregate of all HAPS (Total HAPs) has actual or potential emissions ≥ 25 T/yr.

SM80 = Use if a synthetic minor (potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable limitations) and the permit sets limits ≥ 8 T/yr of a single HAP or ≥ 20 T/yr of THAP.

SM = Use if a synthetic minor (potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable limitations) and the potential HAP emissions are limited to < 8 T/yr of a single HAP and/or < 20 T/yr of THAP.

B = Use when the potential to emit without permit restrictions is below the 10 and 25 T/yr major source threshold

UNK = Class is unknown

[1] Criteria pollutant thresholds in Table 2, State of Idaho Guideline for Performing Air Quality Impact Analyses, Doc ID AQ-011, September 2013.

For All Other Pollutants:

A = Actual or potential emissions of a pollutant are ≥ 100 T/yr.

SM80 = Use if a synthetic minor for the applicable pollutant (potential emissions fall below 100 T/yr if and only if the source complies with federally enforceable limitations) and potential emissions of the pollutant are ≥ 80 T/yr.

SM = Use if a synthetic minor for the applicable pollutant (potential emissions fall below 100 T/yr if and only if the source complies with federally enforceable limitations) and potential emissions of the pollutant are < 80 T/yr.

B = Actual and potential emissions are < 100 T/yr without permit restrictions.

UNK = Class is unknown.

Table 5 REGULATED AIR POLLUTANT FACILITY CLASSIFICATION

Pollutant	Uncontrolled PTE (T/yr)	Permitted PTE (T/yr)	Major Source Thresholds (T/yr)	AIRS/AFS Classification
PM	>100	<100	**100**	SM
PM_{10}	>100	<100	**100**	SM
$PM_{2.5}$	>100	<100	**100**	SM
SO_2	>100	<100	**100**	SM
NO_X	>100	<100	**100**	SM
CO	>100	<100	**100**	SM
VOC	>100	<100	**100**	SM
HAP (single)	< 10	< 10	**10**	B
HAP (total)	< 25	< 25	**25**	B
Pb	< 100	< 100	**100**	B

Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 ..... Permit to Construct Required

The permittee is required by the 9/9/2014 consent order to revise its PTC to include the requirements under item 12 of the consent order. The permittee has requested that a PTC be issued for that and for other revisions to the permit. Therefore, a permit to construct is required to be issued in accordance with IDAPA 58.01.01.220. This permitting action was processed in accordance with the procedures of IDAPA 58.01.01.200-228.

Visible Emissions (IDAPA 58.01.01.625)

IDAPA 58.01.01.625 ..... Visible Emissions

The sources of PM emissions at this facility are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Conditions 2.7 and 2.8.

Standards for New Sources (IDAPA 58.01.01.676)

IDAPA 58.01.01.676 ..... Standards for New Sources

The fuel burning equipment located at this facility, with a maximum rated input of ten (10) million BTU per hour or more, are subject to a particulate matter limitation of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume when combusting gaseous fuels. Fuel-Burning Equipment is defined as any furnace, boiler, apparatus, stack and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer. This requirement is assured by Permit Condition 2.11.

Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

IDAPA 58.01.01.301 ..... Requirement to Obtain Tier I Operating Permit

Post project facility-wide emissions from this facility do not have a potential to emit greater than 100 tons per year for PM_{10}, SO_2, NO_X, CO, and VOC, or 10 tons per year for any one HAP or 25 tons per year for all HAP

combined as demonstrated previously in the Emissions Inventories Section of this analysis. Therefore, the facility is not a Tier I source in accordance with IDAPA 58.01.01.006 and the requirements of IDAPA 58.01.01.301 do not apply.

PSD Classification (40 CFR 52.21)

40 CFR 52.21 ..... Prevention of Significant Deterioration of Air Quality

The facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change at a stationary source not otherwise qualifying under paragraph 40 CFR 52.21(b)(1) as a major stationary source, that would constitute a major stationary source by itself as defined in 40 CFR 52. Therefore, in accordance with 40 CFR 52.21(a)(2), PSD requirements are not applicable to this permitting action. The facility does not have facility-wide emissions of any criteria pollutant that exceed 100 T/yr.

NSPS Applicability (40 CFR 60)

This permitting action does not change the NSPS applicability and the applicable requirements. Refer to the statement of basis for PTC No. P-2011.0120 project 60909 issued May 4, 2012 for details.

NESHAP Applicability (40 CFR 61)

The facility is not subject to any NESHAP requirements in 40 CFR 61.

GACT/MACT Applicability (40 CFR 63)

This permitting action does not change the GACT applicability and the applicable requirements. Refer to the statement of basis for PTC No. P-2011.0120 project 60909 issued May 4, 2012 for details.

The boilers are not subject to Boiler MACT because the facility is not a HAP major source. The boilers are not subject to 40 CFR 63 Subpart JJJJJ because they are natural gas-fired boilers and are not affected sources to the subpart.

Permit Conditions Review

This section describes only those permit conditions that have been added, revised, modified or deleted as a result of this permitting action. Currently PTC template is used for this revised permit.

PERMIT SCOPE

Permit Conditions 1.1 to 1.3

Permit Condition 1.1 states the purpose of this permitting action. Permit Condition 1.2 states those permit conditions that have been modified or revised by this permitting action are identified by the permit issue date citation located directly under the permit condition and on the right-hand margin. Permit Condition 1.3 states that this PTC replaces PTC No. P-2011.0120 project 60909, issued on May 4, 2012 for the potato processing plant and PTC No. P-2017.0026 project 61881, issued on May 12, 2017 for the wastewater treatment plant flare.

Table 1.1

Table 1.1 is revised to include the new Venturi scrubber to be used to control emissions from Line 1 fryer and Specific Products fryer. The pressure drop across the Venturi throat and the water flow rate to the Venturi throat reflect actual design – see vendor PFD included in the updated application package.

The control device description of Line 2 and Line 4 fryers is changed from "wet scrubber" to "air washer". The minimum flow rates for Line 2 and Line 4 air washers are based on engineering investigation of the test for air washers performed on May 31 – June 2, 2017.

The flare information is taken from the SOB for PTC No. P-000417 issued on 5/28/2002 (2011AAG2399). Since PTC No. P-2017.0026 issued 5/12/2017 was for ownership change, no analysis was performed.

Other changes to the table as requested by the applicant are changing "maximum finished product" to "~~finished~~

~~product rate:~~ xx tons per hour finished product" and "maximum heat capacity" to "rated burner capacity".

~~FACILTILY~~FACILITY-WIDE CONDITIONS

Facility-wide conditions (PCs) are taken from the 2012 PTC except that the following PCs are removed because they duplicate the requirements in the general provisions of the permit. These PCs were titled as Excess Emissions (old PC 13), Performance Testing (old PC 15), Monitoring and Recordkeeping (old PC 16), and Reports and Certifications (old PC 18).

Permit Condition 2.10

The Twin Falls Regional Office address is updated to the new address.

Permit Condition 2.11

As requested by the applicant, "Corrections for altitude shall be made in accordance with IDAPA 58.01.01.680", the language in the Rules, has been added to Fuel Burning Equipment Grain Loading permit condition. "0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products" is removed as the facility does not use coal or wood on site.

New Permit Condition 2.14

New PC 2.14 states that the facility shall comply with the facility-wide emission limits contained in Appendix A of the permit.

This permitting action does not allow increase of allowable emissions except for VOC because the application did not provide any discussion or information on possible ambient impact of emissions increases. The modeling analysis only addresses redistribution of the combined limits among the three fryer stacks. This permitting action has corrected VOC emissions limits because the facility performed a source test in 2014 and the source test data ~~revealed~~ established that VOC emissions of fryers were higher than what were originally estimated. Refer to detailed discussions under APPENDIX A – EMISSIONS LIMITS of this section.

New Permit Conditions 2.15 to 2.22

Permit Conditions 2.15 to 2.22 are the monitoring requirements to demonstrate compliance with the facility-wide emissions limits. They are proposed by the applicant and reviewed and revised by DEQ staff.

Unless specified, the emission factors (EFs) in the permit are taken from AP-42 Section 1.4 for natural gas or biogas combustion, from Section 3.3 for emergency engines, and from Section 13.5 for flares.

Flare EFs

Each flare EF in lb/MMBtu is converted to lb/MMscf by multiplying 800 MMBtu/MMscf, the higher heating value (HHV) of the biogas generated on site according to the applicant.

Generator EFs

Each generator EF in lb/hr is calculated as: (EF in lb/hp-hr from AP-42) * (engine break horse power). The engine for the 230-kw generator is rated as 355 bhp, and the engine for the 100-kw generator is rated as 166 bhp.

Permit Condition 2.16

Flare PM_{10} EF

PM_{10} EF in Section 1.4 for natural gas combustion is used as PM_{10} EF for the flare because PM_{10} EF for flares in AP-42 Section 13.5 provides a range not a specific value and because PM_{10} EF in Section 1.4 for natural gas combustion is within that range.

Permit Condition 2.17

Boiler No. 1 NOx EF

In the EI spreadsheet, the facility uses EF of 83.73 lb NOx/MMscf to estimate NOx emissions from Boiler No. 1. The EF was based on 10/14/1999 source test. Because Boiler No. 1 is required to use continuous emission monitoring system (CEMS) to record NOx emissions in lb/MMBtu in Permit Condition 5.14, the facility will use

more ~~accurate~~ current NOx emissions data obtained from the CEMS.

Permit Condition 2.18

SO_2 EF for burning biogas

The SO_2 EF for burning biogas, including in Boiler No. 1, Effluent Heater, and the flare are calculated as follows:

SO_2 (lb/MMscf) = (H_2S scf / MMscf biogas) (lb-mol H_2S/385 scf H_2S)(1 lb-mole SO_2/1 lb-mole H_2S) (64.06 lb SO_2/lb-mole) = (H_2S ppmv) (lb-mol H_2S/385 scf H_2S)(1 lb-mole SO_2/1 lb-mole H_2S) (64.06 lb SO_2/lb-mole)

= 0.166 * H_2S ppmv

Permit Condition 2.19

CO EF for process dryers

CO emissions for the process dryers are calculated using the AP-42 CO EF for natural gas combustion in a boiler. The differences in combustion conditions between boilers and process burners used in potato dryers reduce the reliability of the AP-42 CO EF for calculating CO emissions from the dryers. ~~It is not very accurate. Since~~Because the~~re are still enough~~ margin between the facility-wide CO limit of 81.9 T/yr and major source threshold of 100 T/yr is large enough to accommodate potential errors in the CO emissions estimates for dryers, ~~and because CO emissions from the dryers are relatively low comparing to that from the boilers,~~ a CO source test for dryers is not required by this permitting action.

Permit Condition 2.20

VOC from ~~the~~ fryers

Based on the maximum finished product rates listed in the 2012 permit and using the 2014 source test data for the fryers, the VOC PTE from the fryers are 52 T/yr. The VOC PTE from all combustion sources are 50 T/yr, including the flare. The facility wide VOC PTE would be 52 T/yr + 50 T/yr = 102 T/yr.

However, in the 10/19/2017 EI, the applicant has used higher production rates than those in the 2012 permit, and the estimated VOC PTE of the fryers at these higher operating rates is~~becomes~~ 117 T/yr. The applicant has requested a facility-wide VOC limit of 99 T/yr to remain as a synthetic minor source. The footnote in 10/19/2017 EI states that the production rates used in the 10/19/2017 EI are Lamb Weston's assessment of possible operating rates for the lines and that since the new permit will not include production rate limits, those data are provided for information purposes only.

On October 24-26, 2017, Lamb Weston performed source testing on PM_{10} and VOC after improvements to fryer emissions controls. The new VOC EFs have been reviewed and are approved by DEQ. The EFs are included in Table 3.3 of the permit and will be used for monthly VOC emissions calculations in this section.~~after the control of the fryers are changed or improved. The new VOC EF is developed and DEQ approved. They are included in Table 3.3 of the permit and will be used for monthly VOC emissions calculation here.~~

Permit Condition 2.21

The requirement in PC 2.21 is proposed by the applicant and reviewed and revised by DEQ staff.

PC 2.21 requires the facility to update EFs once required source tests are done for the dryers, fryers, and Boiler No. 1.

PC 2.21 also allows the facility to request EFs update based on other revised technical information and voluntary source test results.

All revised emissions factors shall be approved by DEQ. Upon approval, the revised emission factor shall be used to complete the calculations required in this permit.

Permit Condition 2.22

The requirement in PC 2.22 is proposed by the applicant and reviewed by DEQ staff.

New Permit Condition 2.23

~~It~~ This condition is standard language taken from DEQ's internal guidance for permits containing federal regulations, such a NSPS.

LINE 1 FRYER, LINE 2 FRYER, LINE 4 FRYER, AND SPECIAL PRODUCTS FRYER

New Permit Conditions 3.1, 3.2 and Table 3.1

PCs 3.1, PC 3.2, and Table 3.1 are revised to include the new Venturi scrubber to be used to control emissions from Line 1 and Special Products fryers and to change the pollution control descriptions from "wet scrubber" to "air washer" on Line 2 and Line 4 fryers. These changes address the consent order item 12 bullet No. 1 requirement.

New Permit Condition 3.3

Refer to discussions under APPENDIX A – EMISSIONS LIMITS for details.

New Permit Condition 3.4

Permit Condition 3.4 states that the stack of Line 4 Fryer shall be raised to 50 feet. This stack height is used in the modeling for this permitting action and is proposed by the applicant. The previous PTCs (e.g., the 2012 PTC) list the Line 4 Fryer stack height as 43.3 feet.

New Permit Condition 3.5

Permit Condition 3.5 includes operating requirements for the Venturi scrubber and air washers to control PM emissions from the fryers. The operating range of the Venturi scrubber is based on vendor's design data. Minimum flow rates for Line 2 and Line 4 air washers are based on Method 5/202 engineering investigation performance testing of air washers May 31 – June 2, 2017. This testing involved measuring particulate emissions while operating the air washers under a variety of operating conditions. The operating requirements are proposed by the applicant and have been reviewed by DEQ staff.

New Permit Condition 3.6

Permit Condition 3.6 establishes monitoring requirements for the Venturi scrubber and air washers. The language is taken from DEQ's internal guidance. The nozzle inspection frequency is developed based on the guidance.

New Permit Condition 3.7

Permit Condition 3.7 specifies the PM_{10} compliance demonstration method for compliance with the PM_{10} emissions limits for the fryers. ~~It is~~ as proposed by the applicant and reviewed and revised by DEQ staff.

New Permit Conditions 3.8 to 3.11

Performance testing requirements are proposed by the applicant and reviewed and revised by DEQ staff. These requirements are for demonstrating compliance with the emissions limits and for developing emission factors for the fryers. The proposed performance test schedule is revised to be consistent with DEQ's internal guidance for source testing.

The applicant has requested an enforceable limit of 99 T/yr for VOC to keep the facility as a synthetic minor source. The facility has the potential to emit more than 100 T/yr VOC according to the application. Because the VOC emissions from the fryers varied in the past and because the new Venturi scrubber and the improved air washers may change the VOC emissions rate, a VOC source test is required.

The permit conditions establish a maximum 5-year interval (61 months) between source tests. If the applicant elects to conduct a source test sooner than five years, the five-year interval is based on the date of that source test. The "61-month" specification provides some leeway in scheduling the source test around the required frequency. The provision of an added month is consistent with EPA policies on source testing frequency. For example, a requirement to perform annual compliance testing means testing between 11 months and 13 months after the previous compliance test.

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~~The applicant has requested an enforceable limit of 99 T/yr for VOC to keep the facility as a synthetic minor source. The facility has the potential to emit more than 100 T/yr VOC according to the application. Because the VOC emissions from the fryers varied in the past and because the new Venturi scrubber and the improved air~~

~~washers may change the VOC emissions rate, a VOC source test is required.~~

"or at DEQ approved alternative" is included in PC 3.10 to provide DEQ ~~flexibilities~~ flexibility to change test frequency of every five years based on source test results. Depend on how consistent the EFs are, DEQ may ask for more or less frequent testing.

The permit does not specify which EPA test method to use for VOC source testing; instead it states that the permittee shall test VOC in accordance DEQ approved source test protocol. The following explains why this approach is used:

Method 25A ~~gives~~ expresses VOC results as propane equivalents ~~ppm of propane~~ because propane is used as calibration gas for the method. To estimate VOC emissions in mass, such as lb/hr or Ton/yr from the tested fryer, a weighted molecular weight of the VOC from the fryer is needed. Method 25A does not provide that information.

When the molecular weight of propane is used to calculate VOC mass emission rate emission are properly identified as "lb/hr, expressed as propane"; If the weighted molecular weight of the VOC compounds is higher than the molecular weight of propane, the VOC mass rate expressed as propane would underestimate the actual mass of VOC emissions. This creates a potential for the facility to inadvertently become a major source Title V source due to VOC emissions if the VOC emissions are expressed as propane equivalents. This permit section recognizes potential used of EPA Method 18 to estimate VOC emissions from the fryers if facility-wide VOC emissions are sufficiently large that inaccuracies associated with measuring VOC emissions as propane equivalents. could potentially trigger the Title V major source threshold. These details can be discussed in a test protocol.

~~Sometime people use propane molecular weight to calculate mass rate and state it as "lb/hr, expressed as propane"; When the weighted molecular weight of the VOC from the fryer is higher than the molecular weight of propane, the VOC mass rate in ton/yr from the fryers would be underestimated if expressed in that way. This would put the facility into a risk of becoming a major source and triggering Title V program without knowing it. Facility may consider using EPA Method 18 to estimate VOC emissions from the fryers when at such a production level that the facility-wide VOC emissions could potentially exceed major source threshold. These details can be discussed in a test protocol.~~

LINE 1 DRYER, LINE 2 DRYER, LINE 4 DRYER, AND SPECIAL PRODUCTS DRYER

Revised Permit Conditions 4.1, 4.2 and Table 4.1

The process description in PC 4.1 is revised to make it easier to understand. PC 4.2 describes the control of the dryers. The stack information ~~of~~ for the dryers is removed and is put into Table 1 of this SOB.

Revised Permit Condition 4.3

Refer to discussions under APPENDIX A – EMISSIONS LIMITS for details.

Permit Condition 4.4 (Old PC 40)

PC 4.4 specifies that the dryers shall only burn natural gas.

New Permit Condition 4.5

Permit Condition 4.5 specifies the heat input rates of the dryers. The heat input rates of the dryers are the surrogates for compliance with the NO_X annual limits. No other monitoring is required.

New Permit Condition 4.6

Permit Condition 4.6 is the compliance method proposed by the applicant and reviewed by DEQ staff.

Revised Permit Condition 4.7

PC 4.7 ~~is about~~addresses dryer source testing for PM_{10}. Refer to PC 4.7 for the requirements and refer to discussions in Appendix C of the SOB, under PC 4.8 of the draft permit for additional discussions.

Permit Conditions 4.8, 4.10, and 4.11

PC 4.8 is the revised old PC 43, and PC 4.11 is the revised old PC 44. PC 4.10 is the same as ~~as~~ PC 4.8 except ~~that is~~ for VOC. The~~y are pretty much a~~ permit condition contains standard language for sources testing procedures and ~~source testing~~ reporting.

Permit Condition 4.9

~~VOC emissions from burning natural gas in the dryers are calculated. A question was raised on whether there are VOC emissions from potato drying in addition to VOC emissions from burning natural gas in the dryers. VOC emissions information is not available for this kind of dryer. It has been assumed that VOC emissions from drying potatoes are negligible as the dryer temperature is relatively low (108 °F to 200 °F). However, to avoid the facility potentially exceeding 100 T/yr for VOC, a dryer VOC source test is required when the actual facility-wide VOC emissions exceed 98 T/yr. The source test can be performed on one dryer that is representative of all the dryers. Method 18 is not required because the VOC emissions from drying the potatoes are expected to be low; Using Method 18 may not be cost effective. Method 25A probably would do a good enough job.~~

Consistent with general DEQ practices for estimating VOC emissions from direct-fired potato dryers, dryer VOC emissions are assumed to result only from fuel combustion. DEQ believes therse is also a potential for VOC emissions to occur from the potato drying process itself. For this permit, DEQ has assumed that VOC emissions from drying potatoes are negligible because the dryer temperature is relatively low (108 °F to 200 °F).

Currently, estimated actual facility VOC emissions are sufficiently far below the 100 T/yr major source threshold that the inclusion of potential VOC emissions from potato drying would not cause estimated actual emission to exceed 100 T/yr. Accordingly, at this time there is no need to more completely characterize dryer VOC emissions. However, to avoid the facility potentially exceeding 100 T/yr for VOC, a dryer VOC source test is required when the estimated actual facility-wide VOC emissions exceeds 98 T/yr. The source test can be performed on one dryer that is representative of all the dryers. Method 18 is not required because the VOC emissions from drying the potatoes are expected to be sufficiently low that potential errors associated with measuring VOC emissions as propane equivalents will not be significant.

BOILERS AND HEATERS

Existing Permit Conditions 5.1 and 5.2

The process description for the boilers and heaters are taken from the 2012 PTC. No other changes are made.

Revised Permit Condition 5.3

The combined emissions limits are replaced with individual emissions limits as required by the consent order. Refer to discussions under APPENDIX A – EMISSIONS LIMITS for details.

New Permit Condition 5.4

Permit Condition 5.4 specifies ~~what type of fuel~~the types of fuels that can be burned in Boiler No.1, Boiler No. 2, Effluent Heater, and miscellaneous heaters & burners and their maximum heat input rates.

Revised Permit Condition 5.5 (revised old PC 51)

This is an existing permit condition that limits the biogas usage at the facility-wide level. This includes the biogas usage at both the potato process plant and the wastewater treatment plant flare.

Revised Permit Condition 5.6 (revised old PC 52)

PC 5.6 is revised to make it clearer.

Revised Permit Condition 5.8 (revised old PC 54)

The monthly calculation method in PC 5.8 is removed as it is now specified in PC 2.18. Hourly calculation method is revised to be consistent with what is in PC 2.18.

New Permit Conditions 5.9 to 5.11

The CO EF of 33.2 lb/MMscf used in Permit Condition 2.19 is based on a 1999 source test. The value is less than half of the EF (i.e., 84 lb/MMscf) listed in AP-42. The CO emissions from Boiler No. 1 would be 30 T/yr more when using AP-42 EF. To avoid possible exceedance of 100 T/yr of facility-wide CO, PC 5.9 requires the

permittee to source test CO from Boiler No. 1 when facility-wide actual CO emissions exceed 70 T/yr and to revise facility-wide CO emissions calculations and emissions calculations for Boiler No. 1 if the new CO EF is higher than the one in Permit Condition 2.19. The facility can choose to update the EF if it is lower than what is listed in the permit, but this is not required. If the EF is higher than what is listed in the permit, updating the EF is mandatory.

New Permit Conditions 5.10 and 5.11

Permit Conditions 5.10 and 5.11 are standard languages for source ~~tesingt~~testing and reporting requirements.

As requested by DEQ source test staff, the following old permit condition is removed:

"Test Protocols for Nitrogen Oxide Continuous Emission Monitoring System Certification/ Recertification Tests

For Boiler No. 1, the permittee is encouraged to submit a performance test protocol to DEQ for approval at least 30 days prior to conducting each certification and recertification test of the NO_X CEMS."

L4 AND L1 EMERGENCY DIESEL-FIRED INTERNAL COMBUSTION ENGINES

Permit Conditions ~~are kept~~ remain as they were in 2012 permit. To follow DEQ's internal guidance, minor changes to the format are made.

BIOGAS FLARE

Permit Conditions in this section are taken from PTC No. P-2017.0026 project 61881 issued on May 12, 2017. The 2017 PTC is for the ownership transfer of the wastewater treatment plant from City of Twin Falls to Lamb Weston, Inc.

Permit Conditions 7.4 and 7.5

"Two-year" is replaced with "five years" to be consistent with General Provisions 8.10.

Permit Condition 7.5

"Within 60 days of issuance of this permit" is removed as the biogas flowmeter should have been installed.

GENERAL PROVISIONS

General Provisions are updated using the current PTC template.

APPENDIX A – EMISSIONS LIMITS

The post project PTE provided in the revised EI submitted on 10/19/2017 is used as a basis for these emissions limits unless otherwise stated. This permitting action does not allow increase of allowable emissions except for VOC. VOC emissions measured in the 2014 source test for the fryers are higher than the VOC emissions allowed in the previous permits that were based on old source test data. The applicant has used 2014 source test data to estimate VOC emissions from the fryers and requested to remove the existing VOC emissions limit for the fryers and to establish a facility-wide VOC limit of 99 T/yr.

Emissions Limits for PM_{10}

In the revised EI (10-19-2017), the applicant has redistributed the total fryer PM_{10} emissions from original four fryer stacks to now three fryer stacks and has redistributed the total PM_{10} emissions from four dryers and Boiler No. 1 and Boiler No. 2 to individual stacks as required by the consent order. The hourly and annual sums are kept the same as those in Table 3 and Table 5 of PTC No. P-2011.0120 issued 5/4/2012 and in Table 3.5 of 2010 permit.

~~No changes are made to~~ PM_{10} emissions from other emissions units are unchanged from the rates ~~from what~~that ~~t~~ were last modeled in Tier II operating permit No. T2-050420, issued on June 4, 2007~~from the potatoes processing plant~~.

The permittee has requested a PM_{10} facility-wide limit of 90.8 T/yr for this permitting action.

Emissions Limits for NOx

Facility-wide NOx emissions from the potato processing plant were last modeled in Tier II operating permit No. 083-00062 issued on May 24, 2002 for compliance with annual NOx NAAQS. The modeled rates were the estimated hourly emissions for each source at its capacity at 8,760 hr/hr except for the emergency generators that were modeled for 500 hr/yr.

Because 2012 permitting action was based on a nullifiedinvalidated PSD threshold for GHG emissions, the applicant has requested to use emissions in 2010 permit as a baseline for this permitting action. Therefore, when redistributing the total NOx emissions limits into individual emissions limit for the dryers and boilers as required by the consent order, the NOx emissions rates in Table 3.5 of the SOB for the 2010 permit are used.

~~NOx hourly and annual emissions limits for each emissions unit are included in the permit because NOx has 1-hr and annual NAAQS, and the hourly and annual emissions limits help establishing a baseline for future changes. This approach is consistent with what required in the consent order and in the 2012 permit that removed a FEC at the request of the facility.~~

NOx hourly and annual emissions limits for each emissions unit are included in the permit because the NO_2 NAAQS includes standards for both 1-hour and annual averaging times. and the hourly and annual emissions limits establish a baseline for future changes. This approach is consistent with provisions of the consent order and the 2012 permit that removed the FEC permit provisions.

The permittee has requested a NOx facility-wide limit of 97.7 T/yr ~~through~~ in this permitting action.

Emissions limits for SO_2

Facility-wide SO_2 emissions from the potato processing plant were last modeled in PTC No. P-2009.0093 issued on June 20, 2010 for compliance with the 3-hr, 24-hr, and annual SO_2 NAAQS.

SO_2 hourly and annual emissions limits for each emissions unit are included in the permit because SO_2 has 3-hr, 24-hr, and annual SO_2 NAAQS, and the hourly and annual emissions limits ~~help establishing~~denote a baseline for future changes. This approach is consistent with ~~what were required in~~provisions of the consent order and ~~in~~ of the 2012 permit that removed ~~a~~ the FEC permit provisions ~~at the request of the facility~~. The annual SO_2 limit for burning biogas in Boiler No. 1 and/or Effluent Heater is calculated based on the facility-wide annual biogas usage limit in the existing permit. The annual SO_2 limit for the flare is taken from the PTC No. P-2017.0026 project 61881 issued on May 12, 2017 for the flare.

~~The permittee has requested to remove the ability to burn fuel oil and cooking oil in the boilers. The permittee has also requested an SO_2 facility-wide limit of 75.2 T/yr for this permitting action.~~

The permittee has requested a SO_2 facility-wide limit of 75.2 T/yr for this permitting action based upon facility PTE with current fuel combustion options. In the 2012 the permittee requested that the ability to combust fuel oil and cooking oil in the boilers be removed as part of the strategy to limit CO_2e emissions to less than 100,000 ton/yr. Even though this CO_2e threshold has been invalidated, the permittee has elected to not restore the ability to combust fuel and cooking oil. This results in a decrease in SO_2 emissions for this permit as compared to the baseline emissions estimates, which included combustion of fuel and cooking oil.

Emissions limits for CO

CO hourly and annual emissions limits for each emissions unit are included in the permit because CO has 1-hr and 8-hr NAAQS, and the hourly and annual emissions limits ~~help establishing~~denote a baseline for future changes. This approach is consistent with ~~what were required in~~provisions of the consent order and of the 2012 permit that removed the FEC permit provisions.~~what emissions limits were included in the 2012 permit that removed a FEC at the request of the facility~~.

The permittee has requested a CO facility-wide limit of 81.9 T/yr ~~through~~ in this permitting action.

Emissions limits for VOC

Based on the maximum finished product rates listed in the 2012 permit and using the 2014 source test data for the fryers, the VOC PTE from the fryers ~~are~~ is 52 T/yr. The VOC PTE from all combustion sources are 50 T/yr, including the flares. The facility wide VOC PTE will be 52 T/yr + 50 T/yr = 102 T/yr. The applicant has requested a facility-wide VOC limit of 99 T/yr to remain as a synthetic minor source.

In the 10/19/2017 EI, the applicant ~~has~~ used higher production rates than those used in the 2012 permit.~~, and~~ At these higher production rates, the VOC PTE from the fryers becomes 117 T/yr. The footnote for the 10/19/2017 EI states that these are Lamb Weston's assessment of possible operating rates for the lines and that since the new permit will not include production rate limits, those data are provided for information purposes only.

While ~~the facility keeps the~~ total PM_{10} emissions from the fryers ~~as they are~~will be the same as in the existing permit so as to avoid triggering ~~PM_{10} and $PM_{2.5}$ modeling~~New Source Review, the permit would allow ~~it appears that the facility increases the fryers'~~ potential increases in fryer production rates as long as PM_{10} and $PM_{2.5}$ emissions remain below emissions limits at the higher operating rates. The increased operating rates could ~~and consequently~~ increase fryers VOC emissions ~~from the fryers~~. Using the updated fryer VOC emission factor and the production rates contained in the current permit, fryer VOC ~~emissions for the fryers would~~emissions would increase from 35.96 T/yr to 52 T/yr ~~if only correcting the VOC EF~~. In contrast, when using Lamb Weston's assessment of possible operating rates for the lines, ~~But~~ the revised EI spreadsheet shows ~~the~~ fryer VOC emissions ~~increase from 35.96 T/yr~~increasing to 117 T/yr. This is due to the increase in fryer production rates ~~increase from the rates~~above the rate limits contained in the 2012 permit ~~to the higher rates~~.

While VOC hourly and annual emissions rates for fryers, dryers, Boiler No. 1, and Boiler No. 2 are included in Appendix A of the SOB, the permit only incudes the facility-wide VOC limit of 99 T/yr. This is because ~~as~~ no ~~modeling would be performed for~~ambient impact modeling for hourly or annual VOC emissions ~~for~~ was needed for establishing ~~hourly or annual emissions limits for an individual emissions unit~~compliance with NAAQS.

POST PROJECT EMISSIONS RATES [e]

	PM_{10}		NOx		SO_2		CO		VOC	
Emissions Unit	**lb/day**	**ton/yr**	**lb/hr**	**ton/yr**	**lb/hr**	**ton/yr**	**lb/hr**	**ton/yr**	**lb/hr**	**ton/yr**
L1-SP Scrubber	125.9	23.01	-	-	-	-	-	-	15.1	65.98
Line 2 Fryer	96.2	11.00	-	-	-	-	-	-	5.8	16.86
Line 4 Fryer	164.4	30.04	-	-	-	-	-	-	7.8	34.08
Line 1 Dryer	37.4	6.21	3.53	15.46	0.02	0.09	2.96	12.99	0.19	0.85
Line 2 Dryer	26.2	4.36	0.39	1.72	2.35E-03	0.0103	0.33	1.44	0.02	0.09
Line 4 Dryer	46.3	7.68	2.70	11.81	0.02	0.07	2.26	9.92	0.15	0.65
Special Products Dryer	6.3	1.04	0.49	2.15	2.94E-03	0.01	0.41	1.80	0.03	0.12
Boiler 1[d]	32.19	5.87	14.78	64.72	0.11	0.46	5.86	25.66	0.97	4.25
Boiler 2[d]	12.88	2.35	7.06	30.92	0.04	0.19	5.93	25.97	0.39	1.70
Boiler No. 1 and Boiler No. 2, combined	-	5.89 [a]	-	-	-	-				
Effluent Heater	4.06	0.74	1.86	8.16	0.01	0.05	1.56	6.85	0.10	0.45
Miscellaneous Heaters and Burners	19.68	3.59	10.69	46.81	0.06	0.28	8.98	39.32	0.59	2.57
Biogas (when burned in Boiler No. 1 and/or the Effluent Heater) [b]	-	-	-	-	20.54	74.60[f]	-	-	-	-
Biogas Flare	-	-	1.10	4.00	20.54	81.20 [g]	5.01	19.10[g]	10.67	38.81
230K genset*	6.64 [c]	0.02[c]	11.01	0.29	0.73	0.02	2.37	0.06	0.89	0.02
100K genset*	3.10 [c]	0.01[c]	5.15	0.13	0.34	0.01	1.11	0.03	0.42	0.01
Facility Wide Emissions	-	90.8	-	97.7	-	75.2	-	81.9	-	99.0

[a] Boiler No. 1 and Boiler No. 2, combined for PM_{10} = the total PM_{10} emissions from four dryers and Boiler No. 1 and Boiler No. 2 in 2012 permit - the total PM_{10} emissions from four dryers = 25.18 T/yr – 19.29 T/yr = 5.89 T/yr.
[b] Emissions have already been counted under when the boiler No. 1 and Effluent Heater burn natural gas.

[c] PM_{10} lb/day = 0.781 lb/hr at rated capacity x 8.5 hr/day, permitted daily hours for 230K genset. T/yr = 0.781 lb/hr at rated capacity x 52 hr/yr, permitted annual hours / (2000 lb/T) for 230K genset. PM_{10} lb/day = 0.365 lb/hr at rated capacity x 8.5 hr/day, permitted daily hours for 100K genset. T/yr = 0.365 lb/hr at rated capacity x 52 hr/yr, permitted annual hours / (2000 lb/T) for 100K genset. These were the rates m-odeled ~~at~~ in the 2007 permit.
[d] Proposed for this permitting action. The boilers will burn natural gas only. The applicant requested to void the limits for the boilers in 2012 permit as that permit was based on invalidated PSD threshold for GHG emissions and to use 2010 permit as a base for emissions changes. Emissions are calculated using boilers' rated capacity.
[e] All emissions are taken from the EI spreadsheet submitted on 10/19/2017 unless otherwise stated.
[f] Based on the biogas throughput limit initially established in the 2002 permit and being carried to the current permit.
[g] Existing permit limit from PTC No. P-2017.0026 project 61881 issued on May 12, 2017 for the flare.

PUBLIC REVIEW

Public Comment Opportunity

An opportunity for public comment period on the application was provided in accordance with IDAPA 58.01.01.209.01.c. During this time, there were comments on the application and there was a request for a public comment period on DEQ's proposed action. Refer to the chronology for public comment opportunity dates.

suggests that NSPS Subpart Dc may not apply to Lamb Weston's effluent heater, because the effluent heater is a process heater. NSPS Subpart Dc regulates affected facilities which are defined as follows:

> [T]he affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). 40 C.F.R. § 60.40c(a) (emphasis added). A steam generating unit (1) combusts fuel, and (2) produces steam, or heats water, or heats any heat transfer medium. *Id.* § 60.41c. In contrast, a process heater is a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst. A process heater is not subject to Subpart Dc. *Id.*

Lamb Weston's effluent heater is a process heater because it heats a material (petroleum-based heat transfer fluid) to initiate a reaction. Specifically, the heat transfer fluid acts as a catalyst to initiate the temperature change, which in turn warms effluent discharged from the plant. That heated water is pumped into a conditioning tank and on to the waste water treatment system digester. Heating the heat transfer fluid catalyzes the water heating to maintain optimum temperature in the treatment process. Due to the process and function of the effluent heater, the heater is more appropriately characterized as a process heater, not a steam generating unit, and may not be subject to NSPS Subpart Dc.

Please reconsider the applicability of Subpart Dc and, if DEQ concurs with our assessment, remove the related requirements from the Permit.

Thank you for your assistance and review of these additional comments on the Permit. If you have any questions, please contact me.

Very truly yours,

Curt Snyder
Plant Manager

3/19/18
Date

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March 16, 2018

Shawnee Chen
DEQ State Office
Air Quality Division
1410 N. Hilton
Boise, ID 83706

Submitted via e-mail to: shawnee.chen@deq.idaho.gov

Re: Permit to Construct No. P-2011.0120

Dear Ms. Chen:

Thank you for considering our comments on the Lamb Weston, Inc. PTC (No. P-2011.0120). Since 1973, the Idaho Conservation League has had a long history of involvement with air quality issues. As Idaho's largest state-based conservation organization we represent over 30,000 supporters who have a deep personal interest in ensuring that our air quality is protected throughout the state.

We thank you for the opportunity to submit comments and ask that you please send us subsequent documents for this project. We look forward to continuing to work with the Department of Environmental Quality on this project and others in the future. Please feel free to contact us if you have any questions or require additional information.

Sincerely,

Josh Johnson, Central Idaho Conservation Associate
Idaho Conservation League
jjohnson@idahoconservation.org
(208) 726-7485 x 2

TAP emissions

DEQ acknowledges that TAPs could be emitted from frying food or frying oil at high temperature; however, DEQ does not plan on acquiring a better understanding of this potential source of TAP emissions. IDAPA 58.01.01.161 ("Toxic Substances") prevents DEQ from issuing a permit if it will release toxic air pollutants that could cause harm to human or animal life or vegetation. How has DEQ satisfied this requirement? Please provide specific proof of compliance with the Toxic Substances rule with regards to TAPs emissions from industrial potato fryers. DEQ must attain a better understanding of the potential for TAP emissions from this source prior to approving this permit rather than at some undetermined point in the future.

VOC emission limits

Why did DEQ choose to only include a facility-wide VOC emission limit rather than also including VOC limits for specific emission sources (as was done with other criteria pollutants)? DEQ states "no modeling would be performed for VOC for establishing hourly or annual emissions limits for an individual emissions unit." We request that DEQ clarify why that is the case.

Additionally, in Appendix A of the Draft Permit, footnote 'f' is missing an explanation below the emission limits table. This explanation apparently relates to the VOC emission limits, and should be added to the final permit.

CO emission calculation

In the Statement of Basis, DEQ states that calculation of CO emissions for the process dryers is "not very accurate." This statement concerns us, and we request that the DEQ elaborate on why this calculation is not accurate. For example, what is the error associated with this calculation, and what needs to be done to make it more accurate?